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Galaxy SCIENCE FICTION

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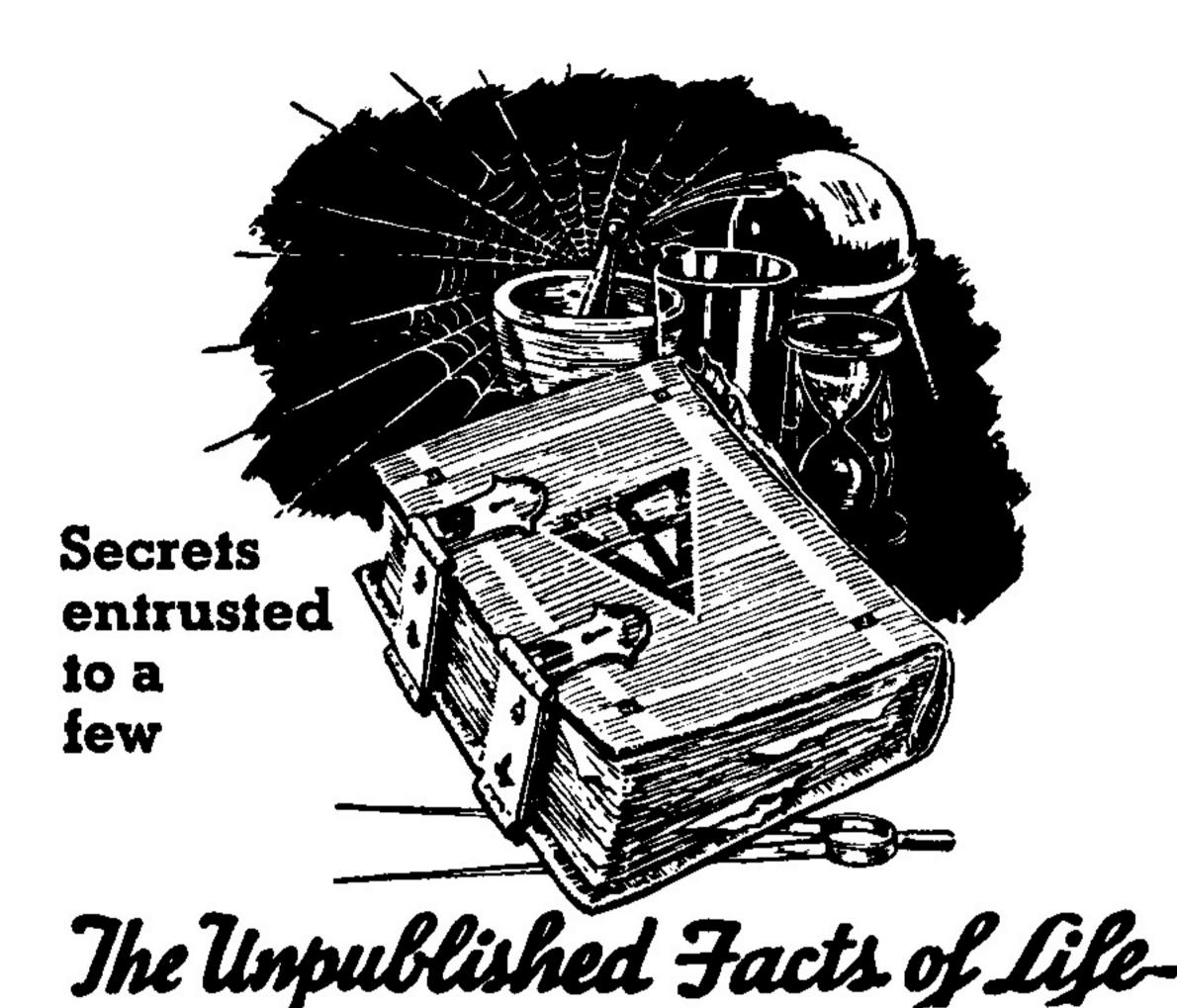
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THERE are some things that cannot be generally told—things you ought to know. Great truths are dangerous to some-but factors for personal power and accomplishment in the hands of those who understand them. Behind the tales of the miracles and mysteries of the ancients, lie centuries of their secret probing into nature's lawstheir amazing discoveries of the bidden processes of man's mind, and the mastery of life's problems. Once shrouded in mystery to avoid their destruction by mass fear and ignorance, these facts remain a useful heritage for the thousands of men and women who privately use them in their homes today.

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The Rosicrucians (AMORC)

SAN JOSE, CALIFORNIA, U.S.A.

THAT'S TWO VOTES

A N Air Force major, writing from New Mexico, recently concluded his communiqué in this neighborly fashion: "I enjoy the magazine in spite of your editorials." Having done a bit of corresponding with him, I know he needed no Act of Congress to make him a gentleman—actually, he was born with a silver foot in his mouth—and was merely needling me.

But you know something, Maje? That's how I feel, too.

Sometimes editorials are fun to do. Occasionally they're an urgently needed safety valve. Now and then, of course, they are a burden to write and, I suppose, to read, though those are the ones I revise most often and drastically. No matter which kind they are, though, I keep wondering what I, a devout entertainer, am doing writing what I refuse to call think-pieces, though they are.

So, Maje, far from needling me, you've found a probably unexpected ally.

Maybe it's just that this month's ideas won't shape up. Let's see what you would do with them.

One of our writers reported

trudging up the subway stairs behind two men and heard the first exclaim, "God's sakes! We get on uptown and the Sun's out. We get down here and it's pouring!" The second man said, "Well, it's better than nothing."

I've been puzzling over that reply for months. Had he only produced a reflex non sequitur? It's likeliest, but—

Maybe he's an interstellar tourist from a world where there is no weather at all!

It's a dazzler, I admit; I have no idea of what such a place would be like. It can't just be lack of an atmosphere, for there would be temperature changes, meteor rains and radiation storms such as the Moon has. Then what?

Maybe he's from some part of this or another planet that chooses its weather — by democratic means, I hope — or decides to skip the whole thing.

Mark Twain may have had a suspicion that this could be. In one of his books, he added an appendix with a wide variety of weather; the reader could pick whatever he thought most suittable for each scene . . . or none!

(Continued on page 144)

MATRIX THE STRATEGY GAMES BASED ON THE NEW THEORY OF GAMES

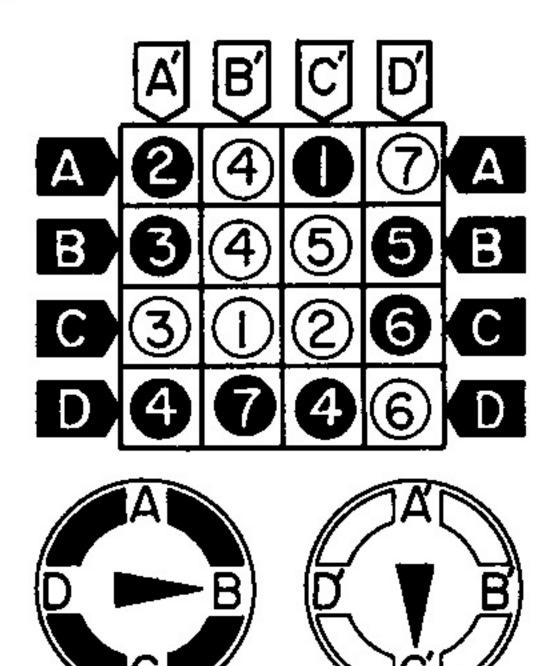
The Theory of Games is in the news! It has been revealed that top-level government planners use the Theory of Games to formulate basic policy. Economists find the Theory of Games an invaluable new tool. All branches of the military have revised their logistic and strategic concepts in the light of this new Theory. Workers in all branches of Science find that the Theory of Games provides new avenues of approach to unsolved problems and places new interpretations on existing data.

MATRIX, a simple and interesting game based on the Theory of Games, trains you to think subconsciously in the new logic of this Theory.

Two MATRIX players take turns placing their numbered markers. They could assemble a matrix that looks like the figure illustrated.

The player who placed the Black tiles selects a horizontal row on his indicator; the player who placed the white tiles selects a vertical column on his indicator. On the first play of this particular matrix, both players simultaneously reveal their indicators set as shown.

WHITE scores 5 points. If you were BLACK, in what proportion should you destribute your choices among the rows A B C D to be sure of winning this particular game over a series of plays regardless of what WHITE may do? After you have played several games of MATRIX by guesswork alone, you begin intuitively to solve problems such as the one illustrated above. Though MATRIX is a simple enough game for a child to play, a new factor rapidly becomes apparent. MATRIX is unique! In chess or checkers you plan your next move only after your opponent has made his move. In MATRIX, because both players reveal their choices simultaneously, you must think from two points of view at the same time! The new multi-valued logic inherent in the Theory of Games becomes a new thought habit as you use it in the concrete situations MATRIX provides. This fascinating game is a training aid to reach a higher order of thinking!



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MATRIX is an enjoyable game. It teaches fascinating new thought processes as it entertains. These methods can only be understood by those who have the mathematical background to study Game Theory. But with MATRIX, you too can add this valuable new tool to your powers of analysis.

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The Dreaming By GERALD PEARCE

Wall

It was as clean as a world can be—but why had Collins killed himself—and how was it I fell, I died, I saw another at the well?

Illustrated by MEL HUNTER

with the light covers a binding weight. Then my feet were cool on the solid comfort of the floor and miraculously the sound was dead.

Slowly, sense by sense, I began to wake up. To the taste of salt. A rasp in my throat. A sudden chill of sweat beginning to evaporate between my rigid shoulder-blades.

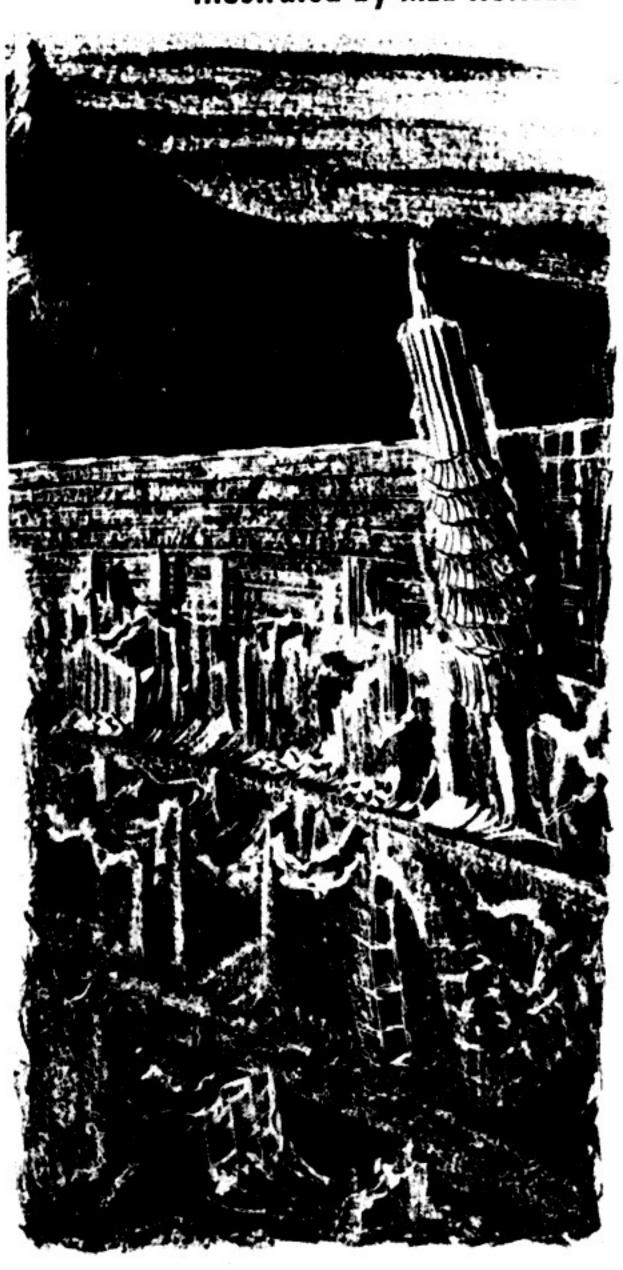
There were minutes when my heart beat the breath from my throat before it seemed to reach my lungs . . .

And then it was over. I stood up, kicked free of the fallen covers. The sick hammering began to subside.

I was awake.

I was not dead.

I stood there in the middle of the floor and thought about it. I was awake and alive and my head swam in an ocean of relief.



ed the heat on under the coffee pot, lit a cigarette. Then I switched on the transmitter and sat down in front of the mike, waiting for the green light to blink on.

"Beck to Central," I said.

"Hello, Johnny," Donovan's voice answered through the speaker. "What brings you in this hour of the night?"

"Get me Radford."

"You're kidding."

"I'm not."

"What's the matter, boy?"

"I'd appreciate your concern more if you got the lead out and put me through to Radford."

There was a long pause after that one. I let it sink in. I didn't want to make things rough on Donovan, but I was too knotted up to do anything about it.

And then he said, "Okay, Johnny. But you know what it's like, rousting out top brass at two A.M."

Vague sounds and a receding rustle told me he had left the microphone. His tone had suggested that ears would burn in descending chain of command until someone tried to get my job. I got a perverse kick out of the idea. Then the coffee pot murmured, the rich, astringent aroma knifing through the gathering smoke.

I found last night's cup, nearly filled it, dug into my gear for

the pint of brandy and added a good splash. After swallowing half a cup straight down, I felt more human and began wondering—now that the fear was gone, now that my hands had stopped shaking and the sweat was dry—what I would say to Colonel Radford.

If I got through to him.

I didn't. The voice that finally came through was narrow, hard-edged and tightly controlled, like its owner.

"Beck! Are you mad?"

"No, Major," I told the microphone.

"Then you know why Collins shot himself."

"No. I want . . ."

"Listen, Beck." I imagined Major Castle squaring off in front of the microphone. "Somehow you threw a big enough scare into Donovan to start a fuse to Radford's bunk. It was blind luck that I was up and able to stamp on it. Damn it, will you ever learn that there are such things as channels?"

"No," I said. "I'm a lousy civilian. Remember?"

MEMORY came over the air as a pause and a helpless, shoulder-shrugging sigh. "All right, Beck. What is it?"

And that was just the point: I didn't know. At least I wasn't sure. I killed the cigarette and

thought a moment before answering. "First, am I supposed to be in any danger?"

"Of course not!"

"Second, I want all the information now available on Fallon's planet . . ."

"That's what you're supposed to be doing, isn't it?" Castle parried.

"Sure—in my field. But I want all the dope that comes in—including the reports from the other Anthro men—as it comes in. Also all earlier reports; medical, biological, chemical, the works. Third, I want Collins' file."

"You saw the department's summary," Castle objected.

"Sure. And I knew the man three years. Don't forget that. I knew him as well as you ever get to know a man you work with. But I've no more idea why he'd blow his brains out than you have."

Castle's tight voice said, "He was a neurotic, Beck. I've been studying the case myself, of course. He only just scraped by on his last psych test. Rated 0.75—"

"When 1.00 is the norm and point six the safety minimum for this job, that doesn't mean a thing. The Psych boys are too good to slip up on a thing like that. Look, Major—Collins wasn't the type to commit sui-

cide because he was alone for three days. After a long enough time, you might do it yourself and so might anyone, but not after three days and not just because you couldn't talk to anyone. What about his radio equipment? Any sign of tampering?"

"None. We checked every millimeter. The generator gave out. You know field men are supposed to keep track of their own equipment. He should have applied for replacements six months ago. Anthro hasn't a kick coming on that score, Beck."

"No one's kicking, Major. The fact remains that he shot himself. Until we find out why, there's a chance of an overlooked danger factor on Fallon's planet and it's not my job to find it."

The speaker breathed irritably. Finally the major said, "Well?"

"I want another man out here."

"If you mean one of mine and not an Anthro man, you're crazy. I can't spare one."

"Anthro's out and you know it."

"There isn't a man I can—"

"I never learned about channels, Major."

"All right, you crumb. Tomorrow morning."

"Fine."

"One detail, Beck." The disembodied voice took on a bassy rumble, as though he had edged nearer the mike to emphasize his point. I could feel it coming. "One question. Why, Beck?"

AND that was it. Why? With the lights on, with the warmth of the brandy and coffee inside me, the chill gone and comfortably familiar equipment on every side, it was hard to think clearly, almost hard to remember. But I did remember. The dream. The opaque, undetailed dream. The noise my throat had made when I came out of it.

"I'm scared," I said. "That's all. Good night."

I switched off the set. The green eye died under a dark cataract. The beginning of a word fell out of the loudspeaker, slurring off more like the forgotten end to a sad story than the start of something, and I stood up and drained the coffee cup.

I wasn't ready for sleep again. I wasn't ready to think about sleep. There was a lot to be done in the morning, but the urge to be at it, coupled with the thought of working after a sleepless night, only magnified my tension and made me all the less inclined to get back on the cot.

I put on shoes and a light coat, picked up my cigarettes and opened the prefab's door. The cool, dreamy air of Fallon's planet came through the opening.

Shale and crumbled masonry and powdered rock made a reas-

suring sound underfoot. Outside, I leaned against that incredible wall and looked down long moments at my job.

It lay in a deep saucer of land below the wall in whose lee the prefab had been set, surrounded by low hills, a vague, pale picture of ruin and soft shadow under the triplet moons. Military and Anthro files spelled its name, like the many others listed, with key initial and land-mass number followed by cartographic coordinates, and described it with code symbols distilled from the reports of men like myself and our successors, a precise, economical, deadly nomenclature for dead things.

Anthro's job was to catalogue the myriad cultures, living or otherwise, encountered in the course of Galactic exploration. It was part of the never-ending process of refining the statistical technique of culture analysis and trait prediction. Lone men did the preliminary work, specialists dropped around to make expert guesses, to outline work to come and estimate time and material needed for full-scale investigation if such were justified.

The hill-cupped ruin had been Collins' job. He had come to it ten days before. The construction men had put up the prefab in the shade of the wall on the low hill-top, run the water hose to

the stream in the hollow and then left him.

Seventy-two hours later—sixty-eight, perhaps, from the generator's failure—Collins was dead. On the fifth day, the crew that had flown out to investigate his radio silence found him in the prefab, the pistol butt still lying across his fingers.

COLLINS was dead, but the job was not. And in the vague, bright-cloudy light of the tight-running moons, the city seemed to be living, wrapped in some quiet fantasy, remembering itself and the days and the ages it had known.

Perhaps, in the daytime, it slept more deeply.

Daylight was still five hours away. There was nothing I could do till then, no matter how little I felt like bed. I had a final smoke before going back into the cabin and closing out the night. But I could not close out the job or Collins or the way he had died.

I could not close out other things.

I had one thing to be proud of next morning. I shaved. Casual inspection would have shown how badly. I misset the dial on the stove, scorched my breakfast and threw it out disgustedly. My breakfast was more coffee. When I was through, my head had stopped pounding and the jitters

had retreated a pace, but my eves throbbed and a gritty sensation clogged the lids.

I got little enough done, and was inside when the long-hop beetle arrived at eleven. When I went out to see who the major had detailed to help me, I found Castle himself climbing toward the prefab. Perhaps because he had come eight hundred kilometers since breakfast, perhaps for other reasons, the major was unhappy. His greeting was limited to a brief nod.

"All right, Beck. You've got your other man." He was a tall, loosely built individual, lean as a rail and if not quite as hard the difference was one to interest only a professional hair-splitter. The voice and face were more edged than usual. I stood aside from the door and invited him in.

"I didn't mean to inconvenience you, Major."

"I'm sure. I told you I was short-handed, Beck. I wasn't joking."

"Neither was I."

HIS pale, unquiet eyes covered the room, flicking from item to item—the unmade cot, the cluttered desk, the stove, the radio and transmitter, the file racks and recording apparatus. His displeasure increased.

"There's a long jump between Anthro and the Military," he

said. "Understand. I have no quarrel with the principle of separation. There's no reason why the two forces can't operate with maximum efficiency under the present setup."

I almost added, "And civilian control," but managed to restrain myself.

"But. While I see no call for your department to be under my command — Colonel Radford's command—I resent any attempt by Anthropology to treat Military as its own sub-department, errand-runner or whipping boy."

"Окау, Мајог."

"You men are ahead of us in public relations, Beck. You've instilled a prejudice against Military."

"There's a long history behind that, Major."

"But you've overloaded this time, and that's why I'm here. I know what sort of stink you'd raise back home, if you didn't get another man when you asked for one, so I'm here on a double-purpose mission: to fulfill your request and to issue a detailed report. This had better be good." He looked over the cabin again. "Your place is a mess. Looks as if you had an all-night party."

His repellent eyes looked keenly at me from under straight brows. "Been drinking, Beck?"

I met the look long enough to show him I was able to, then shrugged and dipped into the wastebasket. I showed him the brandy bottle. "This much," I told him.

He smiled suddenly out of his eyes, though the controlled contours of his face never varied. I threw the bottle back into the receptacle.

"One pint of brandy, Major. D'you suppose Anthro should pass a rule against liquor?"

"It might help."

"With the psych tests we survive? I'm healthy as a rock, physically and mentally. Yet last night I did my best to drink myself into a stupor. There wasn't enough liquor."

The smile left his eyes. "Two men? One after the other? The whole planet was given the standard treatment by Medical. We've been on Safety Schedule Green for six weeks now. Every report shows it clean as a whistle."

"Something overlooked?"
He shrugged. "Such as?"

THOUGHT it over a moment before telling him, wondering with half my head what his brisk, medicinal reaction would be. He waited, smothering impatience and exuding overbearing self-confidence.

"Before I radioed in last night," I told him, "I had a dream. A nightmare. I don't remember what it was about. I woke up

screaming my head off. After I'd talked to you, I went out and looked down on that ruin you flew over before I managed to talk myself into hitting the sack again. It took me an hour to get to sleep and fifteen minutes for the dream to wake me again. I drank half the bottle and tried again. The third time I killed it and got two hours sleep. Then I didn't have any more anesthetic and wasn't ready to try again anyhow."

Castle did not react visibly—a characteristic reaction of his. He might have shown surprise, disgust, contempt, concern. He might have dropped his jaw, thrown back his head and laughed the roof off at the idea of a reportedly intelligent, physically powerful specimen of Homo sapiens, male sex, holder of three academic degrees, suddenly falling prey to dreams that threatened to unhinge him. He did none of these.

Instead he crossed to the desk, pulled out the folding chair and sat down looking up at me . . . speculatively, then with a barely perceptible hint of malice. He said after a while, "What did you dream about? Collins' suicide?"

"I told you. I don't remember."
I sat down on the rumpled cot.
"Not the first time, nor the second or third times. None of the details,
I mean. But I do remember the

over-all emotional quality."

I interlaced my fingers. Castle noticed, gave my hands a glance that made me want to belt him.

"Well?"

"I was dying. I went through every physical and emotional process of dying, up to and except the final extinction of the last thought and feeling."

"I see." His speculative look tightened. I imagined the pupils contracting, catlike, into vertical slits. He said thoughtfully, "Of course I checked your own psych rating, Beck."

"It's good. Damn good."

"One point two, maximum variation of 0.3 in the last three years."

ALL personnel underwent full-dress medical and psych tests annually. Earth time. The slightest deviation in health and psychological makeup might push a man over the border of safety, and while few enough external dangers were encountered in the work, a wide margin had to be maintained.

"You dropped to 0.9 after that bout with Hillman's fever," he added. "Your last attack was eighteen months ago. You might be suffering from some unknown after-effect."

"Hillman's fever is practically a duplicate of Terrestrial malaria," I said bluntly. "Medical gave me a clean bill of health. I trust Medical. Even Military Medical. And Collins never had the disease."

"That's right." Castle stood up, slid the chair neatly under the desk. "Collins never had the disease. Have you already decided that Collins blew his brains out because he was trapped here alone with dreams of death?"

And that brought me up short, without a word in my mouth. Because even if the long shot paid off and it turned out to be true, it was as yet an unwarranted assumption; and it was for damn sure I'd had no intention of letting Castle know I believed it. I hadn't thought I did believe it.

But now, irrationally, trapped
—I realized that I did.

The preliminary skirmish was over and there were things to be done. I made the cot up for the night, while Castle went back to the waiting beetle to collect his gear and send the craft back to Base Camp with, I suspected, a verbal message to Colonel Radford.

On the other hand, being the man he was, he might get a perverse kick out of making a derogatory radio report in my hearing. I shrugged the idea off and tried to build up a wall of indifference to the overbearing man with the pale, overconfident eyes while tidying up the cabin.

I had just lit a cigarette and switched on the heat under the remains of the breakfest coffee when he returned, carrying a valise under one arm and a tightly rolled sleeping bag under the other.

TIE slid his sleeping bag out of the way under the cot. "I sent the beetle back. I gave the pilot instructions to be relayed to the appropriate officers at Base Camp concerning radio communication. We'll make contact at 0800, 1200 and 2000 hours daily, our time. Failing report, the Communications officer will send out a detail at once, top priority. He will do the same if at any time either of us attempts to change or abrogate these instructions. I'm sure you'll find the arrangement satisfactory."

"Sure, Major. I suppose you sent word that so far the only visible disturbance was an Anthro man with nightmares?"

"Of course," he said in some surprise.

"Have some coffee," I said dead-pan. "What's your psych rating, Major?"

He said it was one-point-o, unlocked his valise and produced a bulging brief case.

"Everything you asked for, Beck." He dropped the brief case on the desk and threw it open. "Scientific reports on every aspect of Fallon's planet to date; copies of everything Anthropology has collected or surmised, Medical's file on Collins, the works. Also this." He drew out a yellow medical report and slapped it down face up, where I could read the inscription. #8A-35209. Beck, John Hale. He parked himself on the cot. "Let's get to work."

It took four hours. Castle's manner advertised the belief that the whole procedure was a waste of time, but he was surgical in his thoroughness and knew the business inside and out, every detail of it.

Fallon's planet was an "A" index world: A2-ca in its main classification; "A" meaning Earth-type, or supporting human life without artificial aids such as repirators, synthetic foods or anti-grav. The numeral dealt with intelligent life-forms, "2" the negative designation: "c" native fauna below the level of Terrestrial primates, "a" floral development, the rest of the long index being devoted to a coded breakdown detailing information contained in the first four units.

There were those—Terrestrial and otherwise—who had chuckled over the presumption of Earthmen establishing a scale of values that set Terran standards as the peak of evolutionary achievement, and others who had reacted

differently. The semantically inclined had done the same over our naming the cultural research program Anthropology, but the quibbles were philosophical and no one denied that the system was efficient.

A man with Castle's qualifications—or mine, or Collins'—could give a thorough description of a planet from the one-line index alone, and postulate further data with a high percentage of accuracy.

▲ NTHRO'S key in the index was parenthesized as tentative, except for the absence of the race that had established the culture or cultures whose remains had been found. Although not enough data was in to support statistical guesswork, extrapolation suggested—and the report carefully underlined the wordindependent city states, possibly not dissimilar to the Mayan, a non-humanoid life-form, probably Level III, agrarian, artistic, religious in some manner other.

The sum total was no more than a man with good eyes and a predilection for morning walks would have learned in a week.

"Satisfied with the report?" Castle demanded. "I told you the planet was clean."

I skimmed over Medical's report again. Its concluding summation read like a hymn of praise. Fallon's planet was the world the human race should have chosen to develop on. The list of poisonous flora was still growing, the medics warned, but edible varieties, described and classified ad nauseum, abounded on all three major land masses.

I added the report to the growing pile on my left. "All right, it's clean."

For the rest of it: the planet was slightly larger than Terra, its gravity a shade lighter. A 200-pounder would land to carry five or six fewer pounds on his bones. Its rotation period was divisible by chronometric modification into twenty-four arbieach about 4.3 trary hours minutes longer than an Earth hour. A couple of the inert gasses were missing from the atmosphere, oxygen content ran fraction higher, and water vapor content was on a par with the Levant on a summer day.

"Nuts," I said, and emptied the coffee pot.

"Collins' record."

We took it item by item, though I knew pretty much what it contained. A tall, dark, hard-eyed man with a penchant for direct action that must have thwarted many an official of Castle's type during the eight years he had worked with the department. Collins had contracted bronchial

pneumonia as a boy, after falling in a river on a hunting trip. To a spinterish psychologist, hunting for pleasure had suggested a streak of atavism to be watched, but the only significant item in his general analysis was his classification as a marked cycloid. I knew he had worried over his psych rating, but he had never pulled lower than an 0.71.

"Indicative?"

SAID positively, "No. He was used to the job and he liked it too, Major. His rating dropped and wavered a few points after his wife ditched him three years ago—and remember, Hellene was around a long time bewas transferred to she fore another starship. Then he climbed from the low to a point seven five on his last medical. That's 0.15 above the minimum required for the job. Not too much, but enough. The 0.60 minimum isn't a neurotic rating, Major. It just indicates base qualifications for a lonely job. Isn't there a wellestablished theory that no one rated higher than point three is capable of suicide?

Castle shrugged tightly. "A fit of depression, aggravated by enforced radio silence. Ratings are annual. Anything might have happened to him in the last few months. A manic-depressive—"

"Cycloid," I insisted. "Your

own file probably classifies you as a schizoid personality. Does that make you an incipient hebephrene or catatonic?"

Castle said, "Look here, Beck. If the man had not been danger-ously neurotic he wouldn't have killed himself. That's bedrock."

"And the dreams?"

"If he had the dreams."

Yes. If he had the dreams . . .

Castle said, "If a man in my command had recurrent night-mares that impaired his efficiency, I'd turn him over to Medical without a second thought. In space, on alien worlds, you can't take chances with mental incompetents."

WITH the reports out of the way by mid-afternoon, we had two good hours of sunlight left to explore the dreamy ruin. Key initial, land mass number, and all the other drearily practical attributes of scientific identification could not disguise its quality of haunted charm. In the white, clear warmth of the afternoon sun, it lay quiet and sadly serene. The air was like cool silk. It raised no dust. I thought it must be always spring on Fallon's planet.

If you measured from the wall that backed the Anthro prefab to an isolated cluster of unidentifiable masonry on the far side, the city, was about three hundred meters across at its widest point. In closer truth, it was a sixty-meter walk from the wall to the crumble marking the real perimeter; a downhill walk over ground no different from the bronzed grass slopes visible on every side, and the city itself a mere two-hundred-meter nucleus of gray and blue-white walls slowly falling in on themselves.

The major was quiet in these surroundings.

The city had once had a central street that was now just a clearer path than any other; a diameter bisecting its rough circle. Halfway along it to the farther edge was the miracle I wanted to show the major first, before he had time to clamp his efficient, military mind against the initial effect the city had on him; before he started talking again and the texture of the city and the afternoon was torn apart by statistics, callibrations, scientific guesses . . .

"What is it?"

We approached the parapet. It rose knee-high in the center of the street, thousands of years old, more thousands deserted, worn by countless equivalent hands and arms and elbows and then by the winds and the points of wind-borne sand that even this clear atmosphere must carry, as the days of life and feeling drifted backward to forgetfulness, and

only the walls and beams and fallen roofs remained.

"A well," I told him. I sat on the parapet. Castle leaned both hands on it and bent, peering over the rim into the cool, shadowed cylinder that sank away in narrowing concentric circles to the mercurial coin of water far below. Moss had gathered in green shadow. Here and there time had warped the pattern of the stones, raising one, lowering another, subtly altering perspective. The well was an oasis, alive and smelling green and fresh.

"I'LL be damned," he said suddenly. "The stones are carved. They're carved in bas-relief."

"Not just individually, Major. The carving on each stone is part of a larger pattern."

"I wonder what it represents."
He leaned further over the rim,
peering intently.

"I don't know. We'll find out later, when we get a full crew out here and can get down to look. I don't have the equipment or I'd have been down to the water's edge yesterday. They've been protected down there, Major. The best-preserved decorations in the place."

"There's more?" He sat down.
"A lot. When we go back, take
a closer look at that hunk of wall
up by the prefab. It seems to
have been covered on both sides,

but the stone is pitted so badly most of the details are gone for good. And down here it's everywhere. Symbolic stuff, from the shapes. Probably enough to justify the full-scale archeological research. It's rich, Major. Must have been quite a place, no matter what the natives looked like.

"I'll tell you something. I've been a field man with Anthro for ten years. I've seen dozens of cultures, living and dead. I've prowled through so many ruins that once the work's done and the reports are in, each one blurs into all the ones before it and there's nothing to remember it by. But not this time."

"No?" He raised an interrogative eyebrow. But the gunbarrel directness had left his eyes, and his look was of a man no longer dominating his environment but rather responding to it, and that was what I wanted.

"No," I said. "It's hard to explain."

And it was, too. It's never easy to impart the intangibles of feeling that hover on the verge of conscious thought, but can't quite make the crossing. Especially to a man like Castle whose receptivity is an ephemeral thing that one wrong association can disrupt.

I went carefully then, easing my way, letting the well and the air and the sleeping city do their part. It was their story. My job was to help him listen to it.

He listened, all right, listened while his conscious mind heard me telling him that this one city was more than a scattered mass of inanimate stone and clay to be named in terms of its location and described with years and chemical formulae; because it was a picture, a dream, a feeling, and wherever you went the feeling dominated, emanating from each block of stone, from jagged walls and powdered mortar, from every nook and shadow: a thread of joy, a nostalgic mist, and something else . . .

He nodded slowly, his now quiet eyes looking and not looking, a long way off. And then he said in wonder, "I wonder why the damn fool shot himself?"

It was inevitable, I guess. The stark incongruity had to intrude, and once the idea was there he gave it words that brought him back to who he was and what he was engaged in. The characteristic focus returned to his eyes. The mood was gone.

I stood up. "Maybe we'll find out."

WE roamed until sunset. We outlined individual buildings as clearly as we could, estimated their height and dug around with our hands in the rubble in the hope of finding arti-

facts, but without success.

We surveyed the superficial, and I dug into my memory of survey composites to help form a picture of what the city might have been, and how its people lived and what they looked like.

Thorough as usual, Castle caught on quickly, made his own deductions from what I told him and what he saw. The inhabitants, we thought, had walked upright, with an average five-feet height. Perhaps they were bipeds. Such stairs as we found were of comfortable depth.

By the time we had begun to climb back to the prefab, my head had started to throb and the sting had come back to my eyes. Though the day had been relatively easy, the night before had not, and Castle's presence was the worst hangover remedy that had ever been forced on me. But I knew how I was going to treat the sleep problem tonight. I also knew what the major would think.

I got the first-aid kit out, as soon as we had cleaned up after dinner. He was instantly on guard.

"What's the idea, Beck?"

"I'm taking no chances." I fitted a sterile needle to the hypodermic, punctured the sedative phial and drew two c.c. into the cylinder. "I need the sleep."

Castle looked studiously indif-

ferent. The sting in my forearm was momentarily sharp, then sharp again as the needle with-drew.

"Five-hour shifts?" he suggested.

"Okay, Major."

SLEEP came in minutes. I heard him moving around, then the click as he switched on the transmitter to warm it up for the evening report to Base Camp, but the drug and the tiredness took effect before he made contact and I didn't hear a word of it.

Nor did I dream. The comfortable falling-away preceding sleep merged into the sharper climb to consciousness, as the major's hand on my shoulder shook me awake.

I rolled out, got into shoes and trousers. I felt better, but the effect of the sedative still clogged my head and slowed my thinking. Coffee complained on the stove. In the few minutes it took to wash and pour some coffee down my throat, Castle unfolded the sleeping bag on the cot and bedded down.

"Any trouble tonight, Beck?"
"None. There's a lot to be done tomorrow, Major . . ."

"I'll be ready for it."

He stretched once in his cocoon, turned away from the light, and that was all. In moments, I knew, he'd be swiftly and disciplinedly asleep.

I sat down at the desk with another mug of coffee and lit a cigarette, looking blearily into the next five hours. They stretched ahead in a drugged fog. There was nothing to do but read, nothing to read but the reports, and not a chance in a thousand of getting anything new from them.

I fought for a while to bring some of the edge back to my mind, gave up and got the reports out anyway. I went through the Medical on Fallon's planet first, then opened the one on Collins.

The major's breathing became rhythmic, peaceful.

cernible, but nothing significant noted concerning periods of lower emotional tone as affecting work or co-workers. Statement supports diagnosis that cyclic pattern lies within normal limits for personality this type. General adjustment level confirmed by Pedersen battery (Rorschach, Hakken, Pietro, etc.) . . .

It went on for pages and was followed by more of the same, this time in elaborate tabular form incomprehensible to the layman. But the final analysis was undebatable. Collins was normal. He had been to the last.

Or almost the last.

I pushed the report aside.

In the sleeping bag the major shifted, stretched again, relaxed into deeper sleep. As soon as he was settled, I switched on the transmitter.

"Beck to Central."

"Hi, Johnny," Donovan's voice said in surprise. I turned the speaker down till he was barely audible. He went on with odd inflection, "I didn't expect you in tonight . . ."

"Did you take Castle's eight o'clock report?"

"Come again?"

"Gain me up. Castle's asleep and I don't want to wake him . . . Did you take his report tonight?"

"Yeah. He dictated in full. We got it on crystal, with orders to prepare copies to go to various agencies. Pretty heavy stuff, Johnny. Want me to play it back for you?"

"Don't bother. Give me the gist."

Donovan hesitated.

"Well . . . He took a big slap at you, and another at Anthro. Hints that you and Collins should've been suspended long ago. He thinks something's offbeam in Medical for passing you guys."

"Is he after my job?"

"Looks that way. Jesus, man, what's this about you poking merodine into your arm to make you sleep?"

"Is he trying to make a case

out of that?" I asked angrily. "Trying, hell! Listen, Johnny. You're up to your neck. You know how that guy operates. Details, channels. He never overlooks a thing. Reading between the lines . . . you know what I

"That he'll start a move to incorporate the civilian services into the military setup?"

think?"

"With you as fall guy. Someone's always agitating. All they'll need is one good fall guy. You'll have to pull something shrewd, Johnny. What's up your sleeve?"

"Not a damn thing. I'm riding a hunch and betting on my psych rating. Anything new from the Anthro field men?"

"Yeah. Marius found another ruin way south on Land Mass II. I was on the board when he recorded a prelim. Indications are it's the same as all the others—same race, at least. But it's all shot to hell. Climate's rougher down there. Oh, yeah. Hanson thinks he's discovered what they looked like. The inhabitants, I mean. He's sending in his reconstruction as soon as he completes it."

"Relief carvings?"

"That's right. Trouble is, he says the rock they're carved on has undergone some process or other, I forget what he called it. Anyway, what he means is it's so pitted and bored through it's

hard to make out the details and crumbles easily. That mean anything to you?"

"Maybe. There's some of it around here. I want those reports verbatim."

"I'll dig 'em up as soon as I go off duty."

"Don't take any chances. Make out an official request, or whatever routine is required of Military personnel. I don't want the top brass saying Beck's been undermining military morale and procedure."

"First thing, Johnny. I'll have my relief play 'em for you."

"Fine . . . and, Donovan, channels and everything considered, maybe you can . . . expedite the request, or whatever the official term is."

A faint chuckle came over the air. "I'm with you, Johnny. Anything else?"

"That'll do it. Good night."

I SWITCHER off. The transmitter died. I leaned back and chewed my lip. So maybe Hanson could tell us what they looked like. I doubted that it mattered much. Then there was the business about the stones' appearance; the look of long subjection to a selective solvent that removed certain elements of its composition and left it honeycombed and crumbling. That probably didn't matter either.

But it was something to think about, if for no other reason than I had found it and Hanson had found it. Probably others would report it later on, and tie it in with some aspect of the job.

So much for the job. Also, to hell with the job. My own problem was just as big.

The major rolled over, lay flat on his back and turned his face toward the light. Even in his sleep, he kept that look of unrelenting self-control. He frowned against the light, now; pulled his head around uncomfortably.

His neck glistened.

I came out of the chair, wideawake and watching intently. The prefab was at a comfortable temperature, the window open to the mild night. I stood so that the light fell directly upon him, lighting the sweating skin, the corded neck, the accelerating pumping of the pulse in his throat, and held my breath . . .

There was a netlike silence that caught and magnified the scrape of suddenly tortured breathing from his open mouth. It continued while the pulse ticked off rapid seconds. Sweat beaded and ran down his face. The muscles of his face and neck worked stiffly against themselves.

Explosively the waiting ended. He reared, writhing out of the confines of the sleeping bag in a single motion, eyes open, hang-

jawed. His right hand snaked out holding a service pistol snatched with the precision of long training from some hidden fold in the cocoon.

His voice blurred unintelligibly.

"What?"

"The wall . . ." he said thickly, and focus and recollection returned with startled, scared confusion to his eyes.

"Major! Wake up!"

"I'm awake." He released a long breath. For a moment, he stared in stupefaction at the gun in his hand, now leveled vaguely at the prefab's door across the room, muttered a curt obscenity and dropped it on the cot. He swung his legs to the floor and sat wiping the sweat from his face, watching me with antagonism, and then a futile baffled rage.

"I heard you, Beck."

"Try again?" I asked him encouragingly.

"A scream, damn it."

I shook my head. He got up from the cot and went over to the washbowl, moving with a curious mixture of sleep-ridden loginess and deep agitation. When he had doused himself thoroughly, stinging himself to complete wakefulness, he came back toweling briskly. He wadded the towel, threw it on the cot and dropped beside it.

HE was trembling like a leaf.
I waited.

"Okay, Beck," he said at last.

"What was it about?"

"As you told me. Death."

"You went through the whole thing?"

"To the last flicker."

"Any details?"

"Yes. Nothing meaningful, no sequence of events. Just the feeling and that damned wall, the wall outside, at night or dusk or something, I'm not sure which."

"Go on."

"And then, without rhyme or reason, the scream."

I frowned.

"There was no warning, no preliminary sound. It just came. A full-throated scream that wavered and fell off into a gasp. I'd swear it was you. Beck, are you trying to pull something? I wouldn't put it past you."

"I know. But I'm leveling."

"But damn it, I heard it!" He got up worriedly and began a sharp, angled pacing of the prefab.

The long planes of his face glistened yellow-white and harsh. His stark physical fear had receded, to be replaced by a baffled, bruised anger. "I heard it, Beck. I heard you."

"Screaming?"

"Yes!"

"Wrong night," I said flatly. "That was yesterday."

He took time out to pull himself together. He stopped the random pacing, breathed deeply. I watched brute will eradicate the lines of bewilderment from his face. He flexed his fingers for a moment, watching them, and after a minute of concentration became antagonistically matterof-fact.

"A LL right, Beck. Let's deal with this sensibly." He found my cigarettes on the desk and lit one. "I dreamed—substantially the same dream you had, with the single exception of the visualized wall—and there's no reason to attribute any significance to that. The scream could mean anything. Everyone is to



an extent suggestible, and I suppose I'm no exception. It's entirely possible that suggestion alone stimulated the dream. Collins' suicide, your experience, that damned evocative ruin . . . Does that make sense?"

"Sure. What's the alternative, Major?"

"Is there one? You haven't ex-

plicitly propounded one, remember. Do you attribute the recurrences to something in the environment? You've no evidence. Further. In attributing anything to 'environment,' do you do anything but give suggestion another name and make the matter harder to pin down?"

"Do you believe that?"



He said crisply, "I don't subject myself to the strain of trying to believe what is intellectually unacceptable."

"Okay, let's quibble. I believe in the feeling and the evocative qualities of that ruin. That's your word, remember. I've never felt so strongly that I was in the presence of something so . . ."

"Evidence!" Castle snapped.

"God damn it, Castle. Feeling, thought, perception, the whole lousy lot are subjective and not susceptible to proof. If we go on like this I'll reduce it to solipsism, and you don't accept that any more than I do. All right, it's hunch. But I tell you I know there's . . . something."

He said angrily, "You sophistic son of a bitch. Is that how the civilian services operate?"

"The dream," I said.

"Yes?"

"Go back to sleep."

His habit of having second—and highly cerebral—thoughts, first to escape the danger of a possible thalamic reaction, left a brief second's pause between stimulus and considered response. I jumped into it.

"Go back to sleep. If you get five hours undisturbed, I'll have to grant your point. If not . . ."

I let it hang. A line of muscle hardened in his jaw. His eyes were flat.

"I'll need the sleep."

"The medical kit's over there."
He neither said anything nor
moved for long moments.

"Look, Major. I know what the nightmare's like. I'm not trying to bat you over the head with it. If you want to use the stuff, go ahead. We'll just have to see what we can dig up tomorrow."

At last he said, "I'll use it." I scored one for Beck. It was about time.

Castle sank into a drugged sleep. Without the stimulus of his antagonism, I felt myself slipping back into the old dull-headed lethargy. The argument had settled nothing. Still, Castle had dreamed. He had been badly shaken. That had to be a point in my favor.

The long haul was what would count. I was pretty sure I was tougher than Castle, at least in the flexibility of mental fiber that comes with constant readjustment to the bizarre, the impossible made concrete, the apparent chaos whose alien logic the Anthro field man must track down and define . . .

I congratulated myself on being tougher than Castle.

Was he as brittle as I thought he was? How would he react if he had to get inside an alien culture, view alien life without the flat perspective of an onlooker armed with a gun and a set of Military orders?

There is a vastness Man's mind can never encompass. He measures time in heartbeats, distance in walkable units he can cover between breakfast and lunch. Earth to Luna he can somehow grasp, but Earth to Mars is a figure on a printed page, or the vague oblong blur of remembered passage within the tight but comfortable confines of an interplanetary rocket. This gap is in space and comprehension, too.

The stretched mind falls back on 'Man-dimensioned figures of human life—the sensory experiences of sight and sound and touch and smell that always hold their meaning in themselves even when the fact, the mathematical equation, the incredible complexities of science and logic that lie ready to human use, but not to translation into the sensory language of human immediacy, deny them and their apparent meanings in their wedded entireties.

To the draggled, ridge-ribbed pauper of Delhi or New London, an international dollar is a concrete thing. He knows it as printed paper, worn or crisp, as so many eggs fried to specification, so many hours of warmth next to a dormitory radiator. There is wine in the thought of a dollar. There is nothing in the thought

of a million, which is a figure, a symbol for "many," a gauzy abstraction the mind can never really objectify. And so it was with Castle and Military—and Beck and Anthro, too.

We could never have started to chart the Galaxy but for the more sophisticated minds that handled our abstractions for us, reducing them to terms of provisions and training, free fall and gravities, the reading of gauges and the tidy concreteness of individual actions performed on command. Those were easy. The sense-shackled mind could do as it pleased. The sophisticated minds—the electronic computers—made the real calculations . . .

That was where toughness counted.

Interplanetary and then interstellar flight had brought together living organisms so diverse, so fundamentally opposite in plan and in fabric, that the differences between them seemed as great and as basically incomprehensible as the gulfs that separated their mother planets. Red sand and sand rats. Festering swamps and carnivorous grasses. Bleak hills dipped in blood and the callous maraudings of asocial lizzards.

I'd seen those myself, and many more; dead cultures and living, dead hells and living, the miracle of life from the primal, struggling protoplasmic globs of Tycalpe to the intellectual splendor of the people of Tohn. Because it was my job—because I had two and a half centuries of Anthro tradition behind me—I could find my way around in them and not come out a candidate for the psychopathic ward. Anthro men had to be tough. Too often we catalogued without understanding, and it took the electronic intelligence of the Anthro computers to work out the meaning of what we reported . . .

I made a futile wish for access to one of them now.

And somewhere along the line I fell asleep.

Soon the lines of type began angling into each other in a bleary crisscross. I gave up all pretense of working on them. Castle breathed peacefully.

As a desperation measure I tried organizing my ideas about the dream phenomenon on paper. But there were no ideas to be organized, only vague intuitions, the feeling that Collins' suicide was a violation against sense hinting at the presence of some key factor not even guessed at.

It was a dead end.

I either slept or did not sleep.

I wrote nothing. I wound up with a series of doodles crudely caricaturing the major, superim-

posed it on a sketch of the city as seen from the prefab; the city and the well, the well and the wall, the wall and the builders, the dying, disappearing dead builders of the dream city . . . Cartographic coordinates met in the iris of an eye, melting like wax candles to droop and form arms, four tentacular arms with tendril-like ends to curl around tools and cut the reliefs of the stones in the well and the shapes on the wall before the attack of the drilling and nibbling effaced them.

. . . And the desk had come up to press against my face, and I didn't know how much I had sketched and how much I'd imagined. I knew, as dead certainty, only that a core of anxiety burned at the base of my brain; and around it swam the cells and the tendrils, the barbs and the faces and the multi-faceted eyes of all the alien life I had ever met or heard about. Blood-ruby grains and sapphire nodules dredged study and imagination floated like plankton in a cloudy sea . . .

The wall . . .

A day's growth of beard prickled back into my face from the pressure of the desk-top against which it lay.

The low moan was mine, from another existence.

The wall . . .

I shifted, head and arms leaden, turned my face on the bodywarmed surface and felt a burning inward from the eyes.

The wall loomed heavily in the foreboding. It was not a frag-foreboding. It was not a fragment. It was the total wall that had encircled the city.

THE first dream figure came up the hill.

It—he?—was a biped. Tentacular arms hugged an obscure instrument. Approaching the wall he set this down, his triangular head bent low as he adjusted some aspect of it. He stood, lifting it. A short, thick-snouted addition had been affixed. He clicked a switch. A hum began. The addition revolved, gathered speed. Gently, delicately, he applied it to the wall. Abraided particles fley. The design grew in sharpness under the artist's touch . . .

There is a property of dreaming that fosters the growth of anxiety at variance with the overt content of the dream. In the shadow of a second, anxiety becomes fear, fear becomes terror—a pounding, a drowning, a flight through space that ends with a sickened awakening, gasping, drenched.

My sleeping brain dreamed.

The artist worked.

My dreaming brain worried.

And some part of me wondered

at the conviction that here, somewhere in this realm between the past and the present, lay the key that we needed.

A bright thread of joy traced a counter-pattern on the fabric of fear. It was the joy of creation.

I was the artist . . . and the abrasive bit molded the rock-face.

The city was a hub, the center of a circle of life. About it, spreading in every direction, grew the tiny settlements and villages that were the city's children, meeting at their outer periphery the outposts of the other central cities, till the people merged and coalesced, and the long curving roads reached out and joined what had been separate, and life was good and full, and the pictures on the wall depicted the richness of the harvest.

The dry prickling of the skin began, and with it the cramp that was not quite hunger. The death had begun.

The second dream figure went to the well. I saw it in white sunlight of midday; heavy, slow-moving, carrying a pitcher. I saw through its eyes. The world was black shadow slashed chaotically with white darts and distorted images of the world gone mad. The parapet was an oval fluid form that approached and receded as in a delirium. The packed ground of the roadway was fire

and each step an eternity. The heart's triple beat surged and faded like uneven surf on a gravel shore. Life pumped, a waning tide. The air was oppressive with physical rot.

Lean on the parapet. Rest. Gather strength. Take the rope in tendrilous hands. Lean back from it. Pull. The creak from the pulley is faint and followed by seconds of agonized waiting. Lean, lean again! The water is nearer. The rope burns. The heart's beats are exhausted. They falter, they flutter . . .

The rope no longer burns. The skin burns at its memory. The pulley screams wildly, the rope flails unchecked.

The ground is hot to knees, to belly and tace. The splash as the bucket strikes the water below is a faraway thing without significance.

The light dims.

The heart stops.

The heat begins to die away. There is only knowledge: there will be no more truth of love and giving, of morning clear and cool. The lungs will now empty and never fill again.

The breath rasps outward.

The light goes out. The fire is gone. Even sorrow at last dribbles out with the last vestige of breath.

I looked down at the body. Down into the well.

I was an onlooker. The artist. The past and the present. I was the race.

When the images persisted minutes after I realized that my eyes were wide open—that I was fully awake—I kicked over the chair and blundered to the cot.

HE moaned and made an automatic but feeble effort to push me away. After two minutes of it, I gave up, soaked a towel at the washbasin and began slapping him in the face with it, without any pretense of gentleness. He came to with a grunt, swore unintelligibly through paralyzed lips and slacked back into sleep. I gave him the towel in the face again, yelling.

Finally he got his eyelids up, shoved himself onto one elbow and began blinking stupidly at the light. I dragged him bodily out of the sleeping bag and dumped him onto the floor.

He forced himself back onto the cot and sat on the edge, muttering. I gave him more towel treatment. He reared and knocked the towel from my hand. His face was white and fogged, strained with the effort of trying to wake up.

"Snap out of it, Major. I've found something!"

"Can't it wait?"

"No. I know why Collins killed himself."

"You're dreaming."

"Yes! Awake and dreaming. And I don't think I've even been to sleep."

His face hardened, but was instantly more alert. He groped for cigarettes. I threw him a pack. He puffed one alight and slumped backward across the cot, his shoulders propped against the wall behind it. When he looked at me again, it was with a glint of the old malice, but his muscular coordination was still off and he spoke thickly.

"I wish you were in my command, Beck. It'd be good for my soul. Okay . . . Let's have it."

Cave it to him. It was like clambering over an eight-foot wall, except that the obstacle had no set form or substance. It weaved and dodged, subtly commanding, fluidly evasive.

"Collins. We've no reason to think his experience was any different from our own. Most likely the dreams began his first night, too. I don't know whether anyone checked his medical kit, so we don't know whether he tried dope or not. Okay?"

"Well?"

"Look at the man. He had a rough time and his rating took a dive. No one likes that. It brings them too close to job suspension. Collins wasn't the kind of man to go for a rehabilitation period,

even with full pay. He lived for his work. Maybe that helped bring on the crisis in the first place. Maybe he felt he needed the job to pull himself into shape again.

"But you know how the medics work. Give them a hint and they watch you like a hawk. On his last medical, his rating was up, but they went on watching him. And he went on watching himself.

"And then, in complete isolation on an alien planet, the dreams.

"How would you handle it, Major? You, with your dead one-point-o? You'd get the hell out and submit yourself to Medical. So would he. So would I, normally—if the only alternative was to stay and fight it out alone. But Collins couldn't. He couldn't even make radio contact.

"Imagine the impact of the dreams, identical, insistent, recurrent dreams that kept you awake without let-up. A sane man would think he'd gone mad. Maybe Collins was as ripe for that suggestion as a healthy man can be. And then, Major, to crown it all, when the dreams persisted even when he was awake—when they grew until every second of the day he had to fight to keep separate two concurrent streams of consciousness—the one he knew was of his im-

mediate environment and the other coming from God knows where . . .

"When he couldn't tell which was reality and which the imposition, Major, he decided he was mad and shot himself. That's why he left no record. He didn't want to leave anything that would betray his collapse."

I took a deep, uneven breath and reached for the cigarettes. It had come out fast, and I hadn't heard half of what I'd said. I felt numb.

His face was tensed and wary. He seemed to weigh what I'd said in a balance with myself and my sanity. He had been under the drug just as far as I had, and I know he must be feeling its effects as a clogging deterrent to clear thinking. But the hard, almost warpedly disciplined mind behind the pale eyes sent out a gleam of its usual cold light.

Misted morning with a springtime smell.

"Now you're experiencing this dual consciousness?"

"Yes."

He got up abruptly and stubbed out his cigarette. He found an inch of coffee in the bottom of the pot and turned the heat on under it. Then he picked up the chair I had knocked over and sat down.

"All right, Beck. Suppose I buy it. What's it like?"

THOUGHT the words and heard my voice, dry and harsh with an edged fatigue, and watched his face for the tiny ripples of expression he allowed to play across its surface now and then. All the while the inward images played around the top of my head in all their sharpness and intensity.

rose from the well like a cooling balm. Below, the water gleamed, the bucket quiet on its surface twenty feet away, an age away, unreachable. There was a longing for water as there might be for immortality at the moment of death . . .

There was a fever that was worse than any other in the history of the people, and it burned in the city like a conflagration before it found the roads and then ran screaming down them, dessicating the villages with its breath on its way to ignite the city next in line. The mystic Trinity of Water, Sun and Soil were powerless to stop it, and first there was no more gathering in the centers, then no more tilling, and the arts of life dried up until there was only the waiting, the long, agonized, almost endless waiting that was not endless, for the time was nigh . . .

The death crawled with the sun on my back. I fell, I died, I watched another at the well. The

pulley creaked, the bucket rose. Slow, jaded muscles ached.

The bucket stood on the parapet.

Coolness of water coursed down my throat . . .

I built a house. It took months. I was a father, a child, a mother, a plowman. I loved and created. There was the good smell of soil and green things sprouting, the harvest dance and the three spinning moons. The joy was of living that didn't know death, and the death was the all-denying power that negated the living and the tide of generations, their art and the well, the wall and its chronicles relief-cut and colored. Time was a plaything, a second, a year, a season, a century...

Events lived and repeated without plot or reason. It had all the magnificence of detail, the truth, the relentless insistence of a full-fledged psychosis. I knew its reality. And part of me sat and talked to Castle and knew it for illusion, appraised it and knew my appraisal was sane. One life was mine: Beck, John Hale, Anthropological field man Grade 2, Medical File #8A-35209. The other was the life of a long-dead race whose infinite multiplicity of individual experience was somehow shared.

—Feel of stone, cool-rough and heavy. Smell of mortar clean and sharp—

"BUT how?" Castle raised his his voice for the first time. He was on his feet now, had recommenced the random pacing of a couple of hours before. He stopped to look down at me where I sat on the cot. His fists knotted. "How? There must be a means, a method—"

"Telepathy?"

"A race of telepaths? You're the Anthro man."

"They've been recorded.
Twice."

"But, Beck, these are dead! They've been dead for centuries. What are you trying to feed me? The identity of ideas and matter? The substantial existence of thought-forms? Medievalist claptrap like that?"

"No."

"Then what are you getting at?"

"I don't know."

"Let's get out of here."

"But we've got to know. If we can find some corroboration of what I think the natives looked like, to prove I'm not hallucinating, that there's some telepathic principle involved—"

"How'll you go about it?"

"We can go through the ruin until we find a clear enough carving to show us what they looked like. The dream images themselves could hold the key to the principle. If we hold out long enough . . ."

"Telepathic or not, it might be dangerous. Even diseased, in spite of Medical."

"But it all ties in! The dream ideas and images come first to the sleeping mind, when conscious control is at a minimum. First the harshest—the death—and then, slowly, those that preceded it. When the brain is finally dulled and weakened by lack of sleep and worry, and conscious control becomes less and less a factor in waking life, the intrusions take hold there also. We've got to stay here. And stay awake. There's one piece of evidence we don't have yet."

He sat down abruptly, slumping. Eyes now red and heavylidded threw me a challenge. "And that is?"

I felt like coming right out and saying it. You stuck your neck out, Castle. Now you sweat it out with me or else.

What I said was, "You're not immune, Major."

He caught the drift. His eyebrows rose fractionally. He seemed about to say something, changed his mind and bit it back. Finally he got up and said, "All right, Beck. We'll play it your way. In the meantime . . ."

He stopped. His face, his tightly gesturing hand—his total being—froze into stunned immobility.

I had the sudden sinking con-

viction that the man was dead. It lasted long seconds frozen out of time, and then slowly the rigidity melted into motion. He straightened, threw back his shoulders and let out a ragged breath, staring at me with the look of a man under the effects of dry, icy shock. He whispered something to himself, involuntarily, incredulously, and then for a long time did nothing more than stand there, wearing that look and breathing hard.

"I was walking down the street toward the well," he said at last. "It came—flash—and then it went. I was walking down the..."

It was the evidence we needed. I didn't realize then that he'd actually provided it hours before. Nor had I realized the extent of my anxiety to have it.

I got up and apportioned out the coffee dregs.

PUT down my cup. The waking dream had receded.

"The coffee?" Castle asked.

"Maybe. The coffee stimulates to its exclusion, the sedative drugs to below the conscious receptive level."

"Now that I know what it's like . . ." Castle said to himself. He took a sharp turn about the room. "I guess there'll be more."

He dreaded it and I didn't blame him. The night had taken its toll. My relief at being corrob-

orated had spent itself in a breath, and we were in a state of tension that approached the breaking point.

A degree of animation had replaced the major's usual rigid mask. He talked fast, biting off the words. But the signs were deceptive. The drug in his system could not have worn off so quickly. It was fatigue and the fear of fatigue and a bad case of the jitters that kept him wound up. I guessed how desperately he wanted to sleep, just as I had when my waking shift beganstill did, for that matter—but sleep was forbidden and a thing of fear, and his mind was caught in the cross purpose.

He began to pace endlessly, guessing, extrapolating, obsessed by the malignant possibilities of the dream phenomena. Hidden intelligence, he said. Induced insanity... We had to stay awake.

Dust of harvest dry and golden in the nostrils.

Smoke from my cigarette climbed in a ragged, formless stream. The major's voice became a drone, a deadly burning in the eyes the one thing I was fully conscious of. The dream tugged at my nerves, and the image of the ruin, magically rebuilt, rose and crystallized behind my forehead. Moonset. Smell of sunrise cool, smell of death . . .

There was a message I knew

would come. It had to come: a meeting of minds and emotions that carried the final crystal segment of the puzzle without which the picture was distortion beyond meaning. It might come settling like a cloud of dust, simple intuitive knowledge transcending understanding. Or a word. Or the accidental relocation of a misplaced fact.

It was the sheerest chance that when it came, it came to us simultaneously.

TY/HAT it was that prompted that sprawling, amorphous, mindless thing to spew out what it did—eject it with a force that exploded in identical patterns on the latent receptivity complexes of two separate sentient beingsis a problem for the student of alien biology and neural physics. As it was, it came full-throated and screaming, embodying everything that rejects death and the annihilation of self as incomprehensibly foreign to the mind, anathema, the ultimate incompatible-

It brought me off the cot and onto my feet dry-throated and conscious of a clamoring pit where my heart and viscera should be. Castle's face was the color of dirty snow.

"I heard it. You heard it, Beck. The scream that woke me the first time." "Last night. The noise I made when I came out of it last night."

"But last night-!"

"The telepathic medium still operates."

"Did we hear it? Through auditory channels?"

"I doubt it."

"Where can it come from?"

I shrugged, sweating.

"Beck, if it picked up your voice, or the mental impression of your voice . . ."

The implication sank in slowly. It—whatever it was—could pick a cry and the emotion behind it out of the night, store it, hold it intact, to discharge it under what plan or compulsion there was no way to know. It had held the life and death of a race. Any second might carry a spurt of despair and the subjective explosion of a bullet through the palate, the final spasmodic neural wrench that was the death of Collins.

Castle's tongue flickered over dry lips. Glistening moisture ran down his temple, swerved onto his cheek and coursed to his jawline to hang there, brightly. He had almost stopped breathing and the room was cold light and shadow without sound. Into the silence, or into some goaded subfabric woven between unknown cortical interstices, what came next was soft, whimpering, barely audible, like a child in the night.

"They're dying! There's a fever





and the whole race is dying . . ."
Collins' voice.

"Outside. Let's go."

CASTLE raked the gun from the folds of his sleeping bag and followed me into the soft moonlit night. We blundered once around the prefab, trigger-nerved. The hill rolled down to the ruin. Feet away the massive wall fragment reared dark and quiet. The planet lay in quiet, receptive silence.

"No use," Castle whispered.

"The 'hearing' is illusion. It's inside your head."

"A telepathic faculty could be directional, like any other sense. I got direction."

"But-where?"

"I don't know, now." I let out a long breath.

"Let's go back inside."

Smell of morning. Smell of death.

"Okay."

He poked his gun through the door of the prefab before reentering. I followed him inside. He hung onto the gun as though it alone could anchor him to sanity.

"Well?" he said tightly.

"They're dying," Collins' whimper said again, and this time even Castle sensed direction.

It transformed him into a single-purpose machine. I had time to yell "No!" just once, and threw myself down and out of the line of fire.

His first shot took the door. Plastic shivers hurled by the force of the exploding bullet scattered about. The second shot took the door off its hinges. It was still falling when the gun bucked again. Outside fire blossomed a millisecond later.

He kept it up until the gun was empty, firing from a balanced half-crouch, his set face glistening, the double explosions repeating themselves beyond shock to the point of monotony.

And then there was silence. Into it an echo rolled like half-heard thunder and was gone. Smoke limped from the remains of the door and one corner of the prefab. The reek was corrosive.

There was no sound, in ear or mind . . .

No images behind the eyes.

alien roots had been snatched from the brain, dragging with them their poisonous cilia of fatigue and disruption. It was a violent gust and a burst of pure sunlight in a chamber of mildewed horror. The realization of refound freedom was momentarily stunning.

The crumbling wall.

There was the clue.

I got to my feet with the sick-

ening fear that Castle had killed the chance of a thousand lifetimes. I blundered past him into the open air, heard him crunching over the remains of the door behind me. He came up, breathing heavily, not speaking.

The wall lay squat and dislocated under the three moons. The unreasoned ferocity of Castle's artillery had inflicted more than superficial havoc. Deep cracks starred across its surface.

"The damage is done. We might as well go the limit."

"It looks weak enough, Beck."

Castle dropped his gun. We got our combined weight against the wall, over three hundred and sixty pounds of good sinew. We dug in and pushed.

Its last-ditch token of resistance ended in a scraping crackle, a series of minutely brittle splinterings . . . and then the whole structure gave, cracked further, moved, and suddenly toppled in shards and great chunks and a dry thunder of sound.

We stood, panting, looking at it.

All that remained was a stubby fragment. From its surface, wisps of steam and a faint sweet smoke curled up. Everywhere—clustered in pools and tiny pinpricks, joined and communicating through the porosities of the rock matrix—patches of a pale, gelatinous substance flickered impersonally

The odor was of scorched organic matter.

"It's alive," Castle said in a bewildered husk. "The wall's alive!"

That wasn't true, but it was close enough. I gave him a nod, and for a while neither of us spoke.

The wall.

The crumbling wall.

The eroded, perforated, eatenout wall.

Finally I said, "Reload, Major. We'll try to find how deep it goes."

Y/E never did.

It didn't matter. We could find out later. What did matter was that we had found what we were looking for. It explained the haunting difference, the evocative magic of the ruin; anchored the pervading half-known memories that clung to the air like invisible mist. It might take an army culled from every sub-branch of science to pin down the details, but we had all we needed.

Castle said into the microphone, "Foregoing report by Beck hereby confirmed. Ends. Castle, Major."

"Yes, sir," Donovan said. "Will there be anything else, sir?"

"No."

"Get the lead out, Donovan," I said. "Send that beetle out.

See you in the morning. Have some liquor handy."

"Sure, Johnny."

I killed both the speaker and the transmitter and leaned back to enjoy the look on Castle's face. I didn't, though. After measurable seconds he said tiredly, "Will you never learn, Beck? Standard sign-off procedure wasn't set up as a matter of courtesy . . ."

"Relax, Major."

I grinned at him, wondering about the wording of the report he had filed earlier that night. I wished I had another pint of brandy so I could offer him a drink. His flat, slaty look returned—and left. He dropped onto the cot, swung his feet up and stretched out, staring at the ceiling.

"They won't be here till dawn.

I hope it's over."

"That's what worries me: it might be over. Look at it from Anthro's viewpoint."

He didn't say anything. I left him lying on the cot and went out to look at my job and the havoc the explosive bullets had caused. The moons had paled. The stars were fading. Over the farthest rise beyond the ruin, the sky was turning a pearly, unclouded gray. Quite faint now, the combined acridity and the cloying, sweet scorched smell rose from the blasted gash in the hillside where the wall had stood.

ONE more fact to feed into the computers' memory banks.

We had blasted the wall and found the organism extending through bedrock. How far it went was anybody's guess. It appeared to subsist on the chemical components of the rock's composition—or whatever other medium it could inhabit—drawing away from leached out areas that could no longer support it to leave the characteristic honeycomb effect.

Would Hanson report the dreams tonight? Tomorrow? Ever? And what about the others?

"Imagine a being," I'd said when Donovan recorded my reports. "A featureless being, nonintelligent, composed of non-specialized cells clumped in smaller or larger aggregations." That wasn't hard. It was a simple form of life common in all explored sections of the Galaxy. But then where? How well did the "nonspecialized" description fit? Because there remained the one trait that was peculiarly the organism's own. "Hypothesis: that telepathic projection is a modulation of electrical impulses generated in the cortex. That these are recorded, analogously with magnetic recording, in some fabric of the organism's total structure or unit part, or by modification of cellular or other unit

structure as in crystal recording."
I didn't know. Turn that problem over to the medics and physicists. Hypothesis . . .

To hell with hypotheses. I was too tired. Some day maybe we would learn what determined the strength of re-emanation of a particular thought or image—or would it be conditions leading to selective reception?—and whether an interchange of imprisoned sense data between one area and another or virtual cellular immortality explained the retention of impressions over ten or twenty or fifty thousand Earth years. Until then the bare fact must suffice: Fallon's planet had developed an entity that was, no more and no less, a telepathic recorder with its own indiscriminate playback.

One more problem roughly stated.

Alien life! I thought a little fuzzily, standing there with the coolness of dawn seeping like a balm under my shirt to soothe the tired, cramped muscles . . .

I started violently.

Harvest time. Morning smell with dew and grasses underfoot.

It was faint, elusive as the after-image of a quick, bright light.

The heart's triple beat came from a great distance, but it was strong and vital.

Undisturbed, the city dreamed its ancient dreams.

I relaxed, grinned down at it. We were going to have to train the Anthro squad in a new method of investigation. I sat down in the rubble to enjoy the wait for the beetle.

The city was a hub, the center of a circle of life . . .

—GERALD PEARCE



The Aggravation of Elmer

By ROBERT ARTHUR

The world would beat a path to Elmer's door—but he had to go carry the door along with him!

jam I'd ever seen in White Plains. For two blocks ahead of me, Main Street was gutter to gutter with stalled cars, trucks and buses.

If I hadn't been in such a hurry to get back to the shop, I might have paid more attention. I might have noticed nobody was leaning on his horn. Or that at least a quarter of the drivers were out peering under their hoods.

But at the time it didn't register. I gave the tieup a passing glance and was turning up the side street toward Biltom Electronics — Bill-Tom, get it? — when I saw Marge threading her way to the curb. She was leading a small blonde girl of about eight, who clutched a child-size hatbox in her hand. Marge was hot and exasperated, but small fry was as cool and composed as a vanilla cone.

I waited. Even flushed and disheveled, Marge is a treat to look at. She is tall and slender, with brown eyes that match her hair, a smile that first crinkles around her eyes, then sneaks down and becomes a full-fledged grin—

Illustrated by CAVAT

But I'm getting off the subject. "Honestly, Bill!" Marge said as she saw me. "The traffic nowadays! We've been tied up for fifteen minutes. I finally decided to get off the bus and walk, even though it is about a hundred in the shade."

"Come along to the shop," I suggested. "The reception room is air-conditioned and you can watch the world's first baseball game telecast in color. The Giants versus the Dodgers, Carl Erskine pitching."

Marge brightened. "That'll be more fun than shopping, won't it, Doreen?" she asked, looking down at the kid. "Bill, this is Doreen. She lives across the street from me. Her mother's at the dentist and I said I'd look after her for the day."

"Hello, Doreen," I said. "What have you in the hatbox? Doll clothes?"

Doreen gave me a look of faint disgust. "No," she piped, in a high treble. "An unhappy genii."

"An unhappy—" I did a double take. "Oh, an unhappy genii? Maybe he's unhappy because you won't let him out, ha ha." Even to myself, I sounded idiotic.

Doreen looked at me pityingly. "It's not a he, it's a thing. Elmer made it."

I knew when I was losing, so I quit.

HURRIED Marge and Doreen along toward our little two-story building. Once we got into the air-conditioned reception room, Marge sank down gratefully onto the settee and I switched on the television set with the big 24-inch tube Tom had built.

Biltom Electronics makes TV components, computer parts, things like that. Tom Kennedy is the brains. Me, Bill Rawlins, I do the legwork, and tend to the business details.

"It's uncanny the way all those cars suddenly stopped when our bus broke down," Marge said as we waited for the picture to come on. "Any day now this civilization of ours will get so complicated a bus breaking down someplace will bring the whole thing to a halt. Then where will we be?"

"Elmer says silly-zation is doomed!" Doreen put in happily.

The way she rolled the word out made me stare at her.

Marge only nodded. "That's what Elmer says, all right," she agreed, a trifle grim.

"Why does Elmer say sillyzation is doomed?" I asked Doreen.

"Because it's getting hotter."
The kid gave it to me straight.
"All the ice at the North Pole is gonna melt. The ocean is gonna rise two hundred feet. Then ev-



GALAXY SCIENCE FICTION

erybody who doesn't live on a hill is gonna be drownded. That's what Elmer says and Elmer isn't ever wrong."

Doreen they called her! Why not Cassandra? The stuff kids spout these days!

I gave her a foolish grin. I wanted Marge to get the idea I was really a family man at heart. "That's very interesting, Doreen. Now look, there's the baseball game. Let's watch, shall we?"

We weren't very late after all. It was the top half of the second inning, the score one to one, Erskine in trouble with two men on and only one down. The colors were beautiful. Marge and I were just settling back to watch when Doreen wrinkled her nose.

"I saw that game yesterday!" she announced.

"You couldn't have, sweetheart," I told her. "Because it's only being played today. The world's first ball game ever broadcast in color."

"There was a game on Elmer's TV," Doreen insisted. "The picture was bigger and the colors prettier, too."

"Absolutely impossible." I was a little sore. I hate kids who tell fibs. "There never was a game broadcast in color before. And, anyway, you won't find a color tube this big any place outside of a laboratory."

"But it's true, Bill." Marge

looked at me, wide-eyed. "Elmer only has a little seven-inch black and white set his uncle gave him. But he's rigged up some kind of lens in front of it, and it projects a big color picture on a white screen."

I saw that she was serious. My eyes bugged slightly. "Listen," I said, "who is this Elmer character? I want to meet him!"

"He's my cousin from South America," Doreen answered. "He thinks grownups are stupid." She turned to Marge. "I have to go to the bathroom," she said primly.

"Through that door." Marge pointed.

Doreen trotted out, clutching her hat box.

"ELMER thinks grownups are stupid?" I howled. "Listen, how old is this character who says silly-zation is doomed and can convert a black and white broadcast into color?"

"He's thirteen," Marge told me. I goggled at her. "Thirteen," she repeated. "His father is some South American scientist. His mother died ten years ago."

I sat down beside her. I lit a cigarette. My hands were shaking. "Tell me about him. All about him."

"Why, I don't know very much," Marge said. "Last year Elmer was sick, some tropic dis-

ease. His father sent him up here to recuperate. Now Alice—that's his aunt, Doreen's mother—is at her wits' end, he makes her so nervous."

I lit another cigarette before I realized I already had one. "And he invents things? A boy genius? Young Tom Edison and all that?"

Marge frowned. "I suppose you could say that," she conceded. "He has the garage full of stuff he's made or bought with the allowance his father sends him. And if you come within ten feet of it without permission, you get an electric shock right out of thin air. But that's only part of it. It—" she gave a helpless gesture—"it's Elmer's effect on everybody. Everybody over fifteen, that is. He sits there, a little, dark, squinched-up kid wearing thick glasses and talking about how climatic changes inside fifty years will flood half the world, cause the collapse of civilization-"

"Wait a minute!" I cut in. "Scientists seem to think that's possible in a few thousand years. Not fifty."

"Elmer says fifty," Marge stated flatly. "From the way he talks, I suspect he's figured out a way to speed things up and is going to try it some day just to see if it works. Meanwhile he fools around out there in the gar-

age, sneering about the billions of dollars spent to develop color TV. He says his lens will turn any ordinary broadcast into color for about twenty-five dollars. He says it's typical of the muddled thinking of our so-called scientists—I'm quoting now—to do everything backward and overlook fundamental principles."

"Bro-ther!" I said.

Doreen came trotting back in then, with her hat box. "I'm tired of that game," she said, giving the TV set a bored glance. And as she said it the tube went dark. The sound cut off.

"Damn!" I swore. "Must be a power failure!" I grabbed the phone and jiggled the hook. No dice. The phone was dead, too.

"You're funny," Doreen giggled. "It's just the unhappy genii. See?"

She flicked over the catch on the hatbox.

And the picture came back on. The sound started up. "—swings and misses for strike two!" The air conditioner began to hum.

Marge and I stared. Mouths open. Wide.

"YOU did that, Doreen?" I asked it very carefully. "You made the television stop and start again?"

"The unhappy genii did," Doreen told me. "Like this." She flicked the catch back. The TV picture blacked out. The sound stopped in the middle of a word. The air conditioner whispered into silence.

Then she flipped the catch the other way.

"—fouls the second ball into the screen," the announcer said. Picture okay. Air conditioner operating. Everything normal except my pulse and respiration.

"Doreen, sweetheart—" I took a step toward her—"what's in that box? What is an unhappy genii?"

"Not unhappy." You know how scornful an eight-year-old can be? Well, she was. "Unhappen. It makes things unhappen. Anything that works by electracity, it stops. Elmer calls it his unhappen genii. Just for fun."

"Oh, now I get it," I said brightly. "It makes electricity not work—unhappen. Like television sets and air conditioners and automobiles and bus engines."

Doreen giggled.

Marge sat bolt upright. "Doreen! You caused that traffic jam? You and that—that gadget of Elmer's?"

Doreen nodded. "It made all the automobile engines stop, just like Elmer said. Elmer's never wrong."

Marge looked at me. I looked at Marge.

"A field of some kind," I said.

"A field that prevents an electric current from flowing. Meaning no combustion motor using an electric spark can operate. No electric motors. No telephones. No radio or TV."

"Is that important?" Marge asked.

"Important?" I yelled. "Think of the possibilities just as a weapon! You could blank out a whole nation's transportation, its communications, its industry—"

I got hold of myself. I smiled my best I-love-children smile. "Doreen," I said, "let me look at Elmer's unhappen genii."

The kid clutched the box.

"Elmer told me not to let anybody look at it. He said he'd statuefy me if I did. He said nobody would understand it anyway. He said he might show it to Mr. Einstein, but not anybody else."

"That's Elmer, all right," Marge muttered.

I found myself breathing hard. I edged toward Doreen and put my hand on the hatbox. "Just one quick look, Doreen," I said. "No one will ever know."

She didn't answer. Just pulled the box away.

I pulled it back.

She pulled.

I pulled.

"Bill—" Marge called warningly. Too late. The lid of the hatbox came off in my hands. THERE was a bright flash, the smell of insulation burning, and the unhappen genii fell out and scattered all over the floor.

Doreen looked smug. "Now Elmer will be angry at you. Maybe he'll disintegrate you. Or paralalize you and statuefy you. Forever."

"He might at that, Bill," Marge shuddered. "I wouldn't put anything past him."

I wasn't listening. I was scrambling after the mess of tubes, condensers and power packs scattered over the rug. Some of them were still wired together, but most of them had broken loose. Elmer was certainly one heck of a sloppy workman. Hadn't even soldered the connections. Just twisted the wires together.

I looked at the stuff in my hands. It made as much sense as a radio run over by a truck.

"We'll take it back to Elmer," I told Doreen, speaking very carefully. "I'll give him lots of money to build another. He can come down here and use our shop. We have lots of nice equipment he'd like."

Doreen tossed her head. "I don't think he'll wanta. He'll be mad at you. Anyway, Elmer is busy working on aggravation now."

"That's for sure!" Marge said in heartfelt tones.

"Aggravation, eh?" I grinned

like an idiot. "Well, well! I'll bet he's good at it. But let's go see him right away."

"Bill!" Marge signaled me to one side. "Maybe you'd better not try to see Elmer," she whispered. "I mean, if he can build a thing like this in his garage, maybe he can build a disintegrator or a paralysis ray or something. There's no use taking chances."

"You read too many comics," I laughed it off. "He's only a kid, isn't he? What do you think he is? A superman?"

"Yes," Marge said flatly.

"Look, Marge!" I said in feverish excitement. "I've got to talk to Elmer! I've got to get the rights to that TV color lens and this electricity interruptor and anything else he may have developed!"

Marge kept trying to protest, but I simply grabbed her and Doreen and hustled them out to my car. Doreen lived in a wooded, hilly section a little north of White Plains. I made it in ten minutes.

ed in the garage. I kept going up the driveway, swung sharp around the big house—and slammed on the brakes.

Marge screamed.

We skidded to a stop with our front end hanging over what

looked like a bomb crater in the middle of the driveway.

I swallowed my heart down again, while I backed away fast.

We had almost plunged into a hole forty feet across and twenty feet deep in the middle. The hole was perfectly round, like a half section of a grapefruit.

"What's this?" I asked. "Where's the garage?"

"That's where the garage should be." Marge looked dazed. "But it's gone!"

I took another look at that hole scooped out with geometrical precision, and turned to Doreen. "What did you say Elmer was working on?"

"Agg—" she sobbed, "agg—aggravation." She began to bawl in earnest. "Now he's gone. He's mad. He won't ever come back, I betcha."

"That's a fact," I muttered.
"He may not have been mad, but
he certainly was aggravated.
Marge, listen! This is a mystery.

We've just got to let it stay a mystery. We don't know anything, understand? The cops will finally decide Elmer blew himself up, and we'll leave it at that. One thing I'm pretty sure about —he's not coming back."

So that's how it was. Tom Kennedy keeps trying and trying to put Elmer's unhappen genii back together again. And every time he fails he takes it out on me because I didn't get to Elmer sooner. But you can see perfectly well he's way off base, trying to make out I could have done a thing to prevent what happened.

Is it my fault if the dumb kid didn't know enough to take the proper precautions when he decided to develop anti-gravitation—and got shot off, garage and all, someplace into outer space?

What do they teach kids nowadays, anyway?

-ROBERT ARTHUR

FORECAST

The big news next month, of course, is the first installment of PREFERRED RISK by Edson McCann, winner of the \$6,500 Galaxy-Simon & Schuster novel contest, the richest in the history of science fiction. A really fresh idea is the basis for an exciting suspense story that asks: How dangerous is it to live in a wholly risk-free world? For here is a society that insures you literally from womb to tomb . . . and beyond! Don't miss PRE-FERRED RISK; it's another trail-blazing GALAXY serial.

And there will be at least one novelet and a convoy of short stories . . . plus Willy Ley's FOR YOUR INFORMATION . . . and our regular features.

A hot issue if we ever saw one!

UST ahead of us, we saw a cluster of smoke trees suddenly quiver, though there wasn't a whisper of a breeze, and begin to emit clouds of dense yellow vapor from their trembling branch tips.

"Let's get a move on, Will," said Jack Demaree. His voice was thin and piercing, like the thin air all about us. "It's going to get really hot here in the next twenty minutes."

The steel and glass town of Niobe was visible a quarter mile ahead. "Sure," I said, and changed pace. We had been shambling along lazily, in the effort-saving walk you learn to use in your first week on Mars. I stepped it up to the distance-devouring loose run that's possible only on a light-gravity planet like Mars.

It's tough to have to run in a very thin atmosphere. Your lungs work too hard: you feel as though every step is going to be your last—except that by day the temperature is high, and the light gravity lets you stand effort that would otherwise kill you.

But we hadn't much choice. The smoke trees had passed their critical point, and the curious gelatinous sulphur compounds that served them for sap had turned into gaseous heat. When that happened, it meant that the sun was nearly overhead; and

The

By FREDERIK POHL

illustrated by KIRBERGER



Middle of Nowhere

To get a good, sharp closeup of a Martian, first you had to catch one—and nobody had ever come near any and managed to survive!



with only Mars's thin blanket of air to shield you, you do not stay out in the open at high noon.

Not that we needed to see the smoke trees to know it was getting hot. A hundred and twenty in the shade it was, at least. If there had been any shade.

Demaree passed me with a spurt just as we reached the out-skirts of Niobe, and I followed him into the pressure chamber of the General Mercantile office. We use helium in our synthetic atmosphere in one big ear-popping dose, without any danger of the bends we might have got from nitrogen. I swallowed and rubbed my ears; then we shed our sand-capes and respirators and walked into the anteroom.

Keever peered out of his private office, his lean horse-face sagging with curiosity.

"Demaree and Wilson reporting," I said. "No sign of natives. No hostile action. No anything, in fact, except heat."

Keever nodded and pulled his head back in. "Make out a slip," his voice floated out. "And go out again in two hours. Better eat."

Demaree finished shaking the loose sand out of his cape into a refuse shaft and made a face. "Two hours! Oh, lord." But he followed me to the company cafeteria without putting up any argument.

Was make a dash for the drinking fountain. I won, and sopped up my fill while Demarce's dry and covetous breath seared the back of my neck. Sand patrol can dehydrate a man close to the point of shock in three hours; we had been out for four. You see why we were taking it easy?

We sat down in the little booth where we had put aside our card game with Bolt and Farragut a few hours before and Marianna, without waiting for our order, brought coffee and sandwiches. Her eyes were hooded and unhappy. Nerves, I thought, and tried to catch Demaree's eye. But it didn't work.

He said in his customary slow and biting drawl, "Why, Mary, you're getting stupider than ever. You took away our cards. I swear, girl, I don't know why the Company keeps you—"

He trailed off as she looked straight at him, and then turned away.

"You won't need them," she said after a moment. "Farragut's patrol got it this morning."

Farragut and Bolt, Cortland and VanCaster. Four good men, and it was the same old story. Their patrol ranged far beyond the defense perimeter of Niobe; they had got caught too far from town before it got really hot, and

it was a choice between staying in their cached sandcar or getting stuck enroute in the noonday sun. They had elected the sandcar and something bright and hot had come flashing over a sand dune and incinerated men and car alike.

The hell of it all was none of us had ever seen any of the Martians.

The earliest expeditions had reported that there wasn't any life on Mars at all, barring the tiny ratlike forms that haunted the sparse forests of the North. Then air reconnaissance had reported creatures about the size of men, more or less, that stood up like men, that built villages of huts.

But air reconnaissance was severely limited by the thinness of Mars's air; helicopters and winged aircraft simply did not work, except at speeds so high that it was nearly impossible to make out details. It wasn't until one of the orbiting mother spacecraft, after launching its space-toground shuttle rockets and standing by for the return, spent a dozen revolutions mapping Mars's surface that the first really good look at the Martians and their works was available.

Well, let's say as good as you could expect, considering the mother ship was five hundred miles up.

TT WAS easy enough to send a surface party to investigate the Martian villages; but they were empty by the time Earthmen got there. Our sandcars could move faster than a Martian afoot, but it wasn't healthy to use a sandcar. Somehow, what weapons the Martians found to use against us (and nothing resembling a weapon had ever been found in the deserted villages) seemed most effective against machines. It was flatly impossible that they should have electronic aimers to zero in on the radio-static from the machines; but if it had been possible, it would have been certain—for that was the effect.

I had plenty of time to think about all this as Demaree and I ate our glum and silent meal. There just wasn't anything much for us to say. Farragut and Bolt had been friends of ours.

Demaree sighed and put down his coffee. Without looking at me, he said, "Maybe I ought to quit this job, Will."

I didn't answer; and he let it go. I didn't think he meant it, but I knew how he felt.

General Mercantile was a good enough outfit to work for, and its minerals franchise on Mars meant a terrific future for any young fellow who got in on the ground floor. That's what everybody said, back on Earth, and that's what kept us all there—

the allegedly brilliant future.

That and the adventure of developing a new whole world. I suppose those old Englishmen who went out for the Hudson Bay Company and the East India Company and other Middle-Ages monopolies must have had the same feeling.

And the same dangers. Except that they dealt with an enemy they could see and understand; an enemy that, regardless of skin color or tongue, was human. And we were fighting shadows.

I tasted my coffee and it was terrible. "Hey, Mary—" I started, but I never finished.

The alarm klaxon squawked horrifyingly in the cafeteria; we could hear it bellowing all over the GM building. We didn't wait to ask questions; we jumped up and raced for the door, Demaree colliding with me as we tried to beat each other through. He clutched at me and looked at me blankly, then elbowed me aside. Over his shoulder he said, "Hey, Will—I don't really want to quit..."

THE news was: Kelcy.

Lege, and the Martians had schlagged it. Demaree and I were the first in the Ready Room, and Keever snapped that much information at us while we were waiting the few seconds for the

rest of the patrols to come racing in. They had been in other buildings and came leaping in still wearing their sand capes; they had had to race across the blindingly hot streets in the midday Martian glare.

The whole station complement, less the four who had been lost that morning, left twelve of us. We were on the books as personnel assistants; however, we were actually guards, the entire trouble-shooting force and peace-and-order officers for the town of Niobe.

Keever repeated it for the others. "They attacked Kelcy thirty minutes ago. It was a hit-and-run raid; they fired on all but one of the buildings, and every building was demolished. So far, they report twenty-six survivors. There might be a couple more—out in the open; that's all that are in the one remaining building." Out in the open and it was just past high noon—

Big, fair-haired Tom van der Gelt unsteadily shredded the plastic from a fresh pack of cigarettes. "I had a brother in Kelcy," he remarked quietly.

"We don't have a list of survivors yet," Keever said quickly. "Maybe your brother's all right. But we'll find out soon, because we're going to send a relief expedition."

We all sat up at that. Relief

expedition? But Kelcy was forty miles away. We could never hope to walk it, or even run it, between the end of the hot-period and dark; and it made no sense for us to be out in the open at the dusk sandstorm.

But Keever continued. "This is the first time they've attacked a town. I don't have to tell you how serious it is. Niobe may be next. So we must go there, get the survivors back here, and see if we can find out anything from them. And because we won't have much time, we're going to travel by sandcar."

There was a silence in that room for a moment, while the echo "sandcar" bounced around. Only the echo made it sound like suicide.

Keever coughed. "It's a calculated risk," he went on doggedly. "I've gone over every skirmish report since the first landings, and never—well, almost never—have the Martians done more than hit and run. Now, it's true that this is the first time they've come out against a town—maybe they're changing their tactics.

"I won't try to tell you that this is safe. It isn't. But there's at least a chance that we'll get through—more of a chance, say, than the twenty-six survivors in Kelcy have if we don't try it." He hesitated for a second. Then, slowly, "I won't order any man to do it. But I'll call for volunteers. Anybody who wants to give it a try, front and center."

Nobody made a mad rush to get up there—it still sounded like suicide to all of us.

But nobody stayed behind. In less than a minute, we were all standing huddled around Keever, listening to orders.

WE had to wait another forty minutes. It took time for the maintenance crew to get the sandcars out of their hideaways, where they'd been silently standing—not even rusting in the dry Martian air—since the first Earthman drew the connection between sandcars and Martian attack. Besides, it was still hot and, even in the sandcars, it would help for the sun to be a few degrees past the meridian.

There were fourteen of us in three cars—the patrols, Keever and Dr. Solveig. Solveig's the only doctor in Niobe, but Keever requisitioned him — we didn't know what we might find in Kelcy. Keever's car led the party; Demaree, Solveig and I were in the last, the smallest of the lot and the slowest.

Still, we clipped off fifteen miles of the forty-mile trip in eight minutes. The cats were flapping until I was sure they would fly off the drive wheels, but somehow they held on as we

roared over the rolling sand.

It sounded as though the car was coming to pieces at every bump—a worrisome sound but not, I think, the sound that any of us was really worrying about. That sound was the rushing, roaring thunder of a Martian missile leaping at us over a dune; and none of us expected to hear it more than once . . .

The way to Kelcy skirts what we call the Split Cliffs, which all of us regarded as a prime suspect for a Martian hangout. There had been expeditions into the Split Cliffs because of that suspicion; but most of them came back empty - handed, h a v in g found nothing but an incredible tangle. However, the ones that didn't come back empty-handed didn't come back at all; it was, as I say, a prime suspect. And so we watched it warily until it was almost out of sight behind us.

Martians or none, the Split Cliffs is a treacherous place, with nothing worth an Earthman's time inside. Before Mars's internal fires died completely, there had been centuries of fierce earthquakes. Split Cliffs must have been right over a major fault.

The place is cataclysmic; it looks as though some artist from the Crazy Years—Dali or Archipenko—had designed it in a rage. Sharp upcroppings of naked, metallic rock; deep gashes with per-

fectly straight hundred - foot sides. And because there happens to be a certain amount of poisonously foul water underground, the place is as heavily vegetated as anything on Mars. Some of the twisted trees reach as high as thirty feet above the ground—by Martian standards, huge!

EVEN Demarce, at the wheel of the sandcar, kept glancing over his shoulder at the Split Cliffs until we were well past them.

"I can't help it," he said halfapologetically to me, catching my eyes on him. "Those lousy trees could hide anything."

"Sure," I said shortly. "Watch what you're doing." I wasn't in a mood for conversation — not only because of the circumstances, but because my nose was getting sore. Even in the car we wore respirators — on Keever's orders. I think he had an idea that a Martian attack might blow out our pressure before we could put them on. And three hours that morning, plus five hours each of the several days before, had left my nose pretty tender where the respirator plugs fit in.

Dr. Solveig said worriedly, "I agree with Williams, please. You have come very close to the other cars many times. If we should hit—"

"We won't hit," said Demaree. But he did concentrate on his driving; he maintained his forty meters behind the second car, following their lead as they sought the path of least ups-and-downs through the sand dunes toward Kelcy.

It began to look, I thought as I watched the reddish sand streaming by, as though Keever's calculated risk was paying off. Certainly we had come nearly twenty miles without trouble, and past the worst danger spot on the trip, the Split Cliffs. If our luck held for ten minutes more...

It didn't.

"God almighty!" yelled Demaree, jolting me out of my thoughts. I looked where he was looking, just in time to see flame coursing flat along the ground. It snaked in a quivering course right at the middle sandcar of our three; and when the snaking light and the jolting car intersected...

Catastrophe. Even in the thin air, the sound was like an atomic bomb. The spurt of flame leaped a mile into the air.

WE WERE out of the car in seconds, and the men from Keever's car joined us. But there was nothing to do for the seven men in the second car.

"They went after the biggest,"

Keever said bitterly. "Now—"
He shrugged. One thing was sure,
and he didn't have to say it.
None of us wanted to be in a
sandcar with the motor going
right there and then.

There was no sign of the enemy. Around us were empty sand dunes—but not empty, because out of them had come the missile. The only break was the fringe of the Split Cliffs behind us.

Keever methodically zipped up his sand cape and went through the routine of tucking in flaps at the neck and arms without speaking. None of us had anything to say. Demaree, with a stronger stomach than mine, took another look inside the blackened frame of the second sandcar, and came back looking as though his stomach wasn't so strong after all.

We moved away from the parked sandcars and the wreck of the one that would never move again, and held a council of war. By Keever's watch, we had time to get to Kelcy or go back to Niobe—at a half trot in either case. We were exactly at midpoint. No one suggested using the sandcars again, though there wasn't a flicker of a threat from the dunes.

The decision was Kelcy.

But the Martians took the decision out of our hands. We trotted along for nearly an hour, on the move twenty minutes, resting five, and it began to look as if we'd make it to Kelcy without any more trouble. Though, in truth, we had had trouble enough, because it would be enough of a job getting ourselves back to Niobe without the strong probability of trying to carry injured survivors from Kelcy.

The remorseless noonday deadline would apply the next day; and travel on Mars by night was nearly out of the question. It is a thin-aired planet, so the sun beats down fiercely; it is a thinaired planet, so the heat is gone minutes after sundown.

Thinking those thoughts, though we hadn't the breath to speak them, when the Martians struck again, this time with something new. There was a golden glow from a sand dune ahead of us to the left. Keever, in the lead, hesitated for a second; but he didn't hesitate long enough. He plunged on, and when he and two of the others were between the two dunes, golden lightning flashed. It was like the spray of a fiery hose,



from one dune top to the other; and where it passed, three men lay dead.

It wasn't fire; there wasn't a mark on the bodies, but they where at dusk, when the twilight of us, blasted the tops of the glowing dunes with our flame rifles, but it was a little late for that. Demaree and I broke for the dune to the right, rifles at the ready. We scrambled up the sides and spread out halfway up to circle it—it was slagged from our own rifles at the top, and certainly nothing could be alive up there. But nothing was alive behind it, either—nothing we

could see. The sands were empty.

Demaree swore lividly all the way back to where the bodies of the three men lay. Dr. Solveig, bending over them, said sharply, "That is enough, Demaree! Think what we must do!"

"But those filthy-"

"Demaree!" Solveig stood up straight and beckoned to the coly other survivor who had raced to explore the dune to the left, with the same results. He was a man named Garcia. He and I had come out together, but I didn't know him very well. "Have you seen anything?" Solveig demanded.



Garcia said bitterly, "More of that fire, Doc! From that hill I could see two or three others shining, down along the way to Kelcy."

"I had suspected that," Solveig said somberly. "The Martians were aware of what we proposed. Kelcy is booby-trapped; we cannot expect to get there."

"So where does that leave us?" demanded Demaree. "We can't stay here! We can't even make it back to Niobe-we'd get caught in the sandstorm. Maybe you'd like that, Doc, but I saw a man after the sandstorm got him a year ago!" A patrolman like ourselves, who incautiously found himself out in the middle of nowhere at dusk, when the twilight sandstorm rages from East to West and no human can live for an hour, until the gale passes and the tiny, lethal sand grains subside to the surface of the planetwide desert again. His own respirators had killed him; the tiny whirlpumps were clogged solid with sand grains packed against the filters, and he had died of suffocation.

Solveig said, "We go back. Believe me, it is the only way."

"Back where? It's twenty-five miles."

"To Niobe, yes. But we shall not go that far. I have two proposals. One, the sandcars; at

least inside them we will not suffocate. Two, the Split Cliffs."

We all looked at him as though he had gone insane. But in the end he talked us around—all but Garcia, who clung obstinately to the cars.

Cliffs, leaving Garcia huddled inside the first car with something of the feelings of the worshippers leaving Andromeda chained to the rock. Not that we were much better off, but at least there were three of us.

Solveig had pointed out persuasively that inside the growth of the Split Cliffs the sandstorm couldn't touch us; that there were caves and tunnels where the three of us, huddled together, might keep each other alive till morning. He admitted the probability that we would find Martians there before us was high, but we knew the Martians had spotted the cars. And at least inside the junglelike Split Cliffs, they would be at some disadvantage. Unless they could overpower us by numbers, we should be able to fight them off if they discovered us. And even if they did outnumber us, we might be able to kill a few whereas on the sand dunes, as we had discovered, they would strike and be gone.

Dr. Solveig, in the lead, hesi-

tated and then slipped into the dense yellowish vegetation. Demaree looked at me, and we followed.

There were no trails inside, nothing but a mad tangle of twisty, feather-leaved vines. I heard dry vine-pods rattling ahead as Solveig spearheaded our group, and in a moment we saw him again.

The ground was covered with the fine red sand that overlies all of Mars, but it was only an inch or two deep. Beneath was raw rock, split fissured with hairline cracks into which the water-seeking tendrils of the vegetation disappeared.

Demaree said softly, "Dr. Solveig. Up ahead there, by the little yellow bush. Doesn't that look like a path?"

It wasn't much, just a few branches bent back and a couple broken off; a certain amount of extra bare rock showing where feet might have scuffed the surface sand off.

"Perhaps so," said Solveig.
"Let us look."

We bent under the long, sweeping branches of a smoke tree—too cool now to give off its misty yellow gases. We found ourselves looking down an almost straight lane, too straight to be natural.

"It is a path," said Dr. Solveig.
"Ah, so. Let us investigate it."

I started to follow him, but Demaree's hand was on my shoulder, his other hand pointing off to one side. I looked and saw nothing but the tangle of growth.

Solveig turned inquiringly. Demaree frowned. "I thought I heard something."

"Oh," said Solveig, and unlimbered his flame rifle. All three of us stood frozen for a moment, listening and watching. But if there had been anything, it was quiet and invisible now.

DEMAREE said, "Let me go first, Doc. I'm a little younger than you." And faster on the draw, he meant. Solveig nodded.

"Of course." He stepped aside, and Demaree moved silently along the trail, looking into the underbrush from side to side. Solveig waited a moment, then followed; and a few yards behind I brought up the rear. I could just see Demaree's body flickering between the gnarled tree trunks and vines up ahead. He hesitated, then stepped over something, a vine or dead tree, that lay snaked across the path. He half turned—

Snap!

The vine whipped up and twisted about his leg, clung and dragged him ten feet into the air, hanging head down, as a long straight tree beside the path snapped erect.

A deadfall—the oldest snare in the book!

"Jack!" I yelled, forgetting about being quiet and half-forgetting, too, that I was on Mars. I leaped toward him, and blundered against the trees as my legs carried me farther than I thought. Solveig and I scrambled to him, rifles ready, staring around for a sight of whatever it was that had set the trap. But again—

Nothing.

Demaree wasn't hurt, just tangled and helpless. A flood of livid curses floated down from him as he got his wind back and began struggling against the vine loop around his legs.

"Take it easy!" I called. "I'll get you down!" And while Solveig stood guard, I scrambled up the tree and cut him loose. I tried to hold the vine, but I slipped, and he plunged to the ground unhurt.

The three of us stood there for a moment waiting for the attack. And it didn't come.

For a moment, the Martians had had us; while Demaree was in the tree and Solveig and I racing toward him, they could have cut us down. And they hadn't. They had set the trap, and passed up its fruits.

We looked at each other wonderingly.

Why?

Y/E FOUND a cave just off the trail, narrow and high, but the best protection in sight against the dusk sandstorm and the night's cold. The three of us huddled inside. Demaree suggested making a fire. But although the wood on the ground was dry enough to burn even in Mars's thin air, we decided against it. Maybe, later on, if we couldn't stand the cold, we'd no choice. Meanwhile, have though, there was no sense attracting attention.

I asked Solveig, who seemed to take command of our party, if he thought there was any objection to talking, and he shrugged. "How can one tell? Perhaps they hear, perhaps they do not. Air is thin and sounds do not carry far to our ears. To Martian ears? I don't know."

So we talked—not loud and not much, because there wasn't, after all, much to say. We were preoccupied with the contradictions and puzzlements the Martians presented.

Fantastic weapons that struck from nowhere or shimmered into being between sand dunes—and a culture little beyond the neolithic. Even Earth's best guided missiles could have been no more accurate and little more deadly, considering the nature of the target, than the one that obliterated car number two. And the golden

glow that killed Keever was out of our experience althogether.

And yet—villages of sticks! There had been no trace in any Martian dwelling of anything so complicated as a flame-rifle, much less these others . . .

It grew very slightly darker, bit by bit; and then it was black. Even in our cave we could hear the screaming of the twilight wind. We were in a little slit in the raw rock, halfway down one of the crevasses that gave the Cliffs area its name. Split Craggy, tumbled, bare rocks a hundred feet below us, and the other wall of the crevasse bare jumping distance away. We had come to it along an irregular sloping ledge, and to reach us at all the wind had to pass through a series of natural baffles. Even so, we saw the scant shrubbery at the cave mouth whipped and scourged by the dusk-wind.

Demarce shivered and attempted to light a cigarette. On the fourth try, he got it burning, but it went out almost at once. It is possible to smoke in Mars's air, but not easy, because of the pressure. The tobacco burns poorly and tastes worse. He grunted, "Damn the stuff. You think we'll be all right here?"

"From the wind?" asked Solveig. "Oh, certainly. You have seen how little sand was carried in here. It is the cold that follows the wind that I am thinking of . . ."

gone, but the cold remained, deeper and more intense than anything I had ever felt before. Our sand capes were a help, almost thermally non-conducting in either direction. We carefully tucked under all the vents designed to let perspiration escape, we folded them around us meticulously, we kept close together and still the cold was almost unbearable. And it would grow steadily worse for hours.

"We'll have to build a fire," said Solveig reluctantly. "Come and gather wood." The three of us went scouring up the ledge for what we could find. We had to go all the way back to the top of the crevasse to find enough to bother carrying; we brought it back, and while Demarest and I worked to set it afire, Solveig went back for more. It wasn't easy, trying to make it burn.

Demaree's pocket lighter wore itself out without success. Then he swore and motioned me back, leveling his flame rifle at the sticks. That worked beautifully. Every last stick was ablaze in the wash of fire from his gun. But the blast scattered them for yards, half of them going over the side of the ledge. We charred our fingers and wore our-

selves out picking up the burning brands and hurling them back into the little hollow where we'd started the fire. We dumped the remaining armload on the little blaze, and watched it grow. It was all radiant heat, and our backs were freezing while we toasted in front; but it helpedhelped very much. Then Demaree had an idea, and he slipped a cartridge out of his rifle and stripped it. The combustible material inside came in a little powder, safe enough to handle so long as no spark touched it. He tossed the detonator cap in the fire, where it exploded with a tiny snap and puff of flame, and carefully measured out the powder from the cartridge in little mounds, only a few grams in each, wrapping each one in a twist of dried vine-leaves.

"In case it goes out," he explained. "If there's any life in the embers at all, it'll set one of these off, and we won't have to blow up the whole bed of ashes to get it started again."

"Fine," I said. "Now we'd better build up a woodpile--"

We looked at each other, suddenly brought back to reality.

Astonishing how the mind can put aside what it does not wish to consider; amazing how we could have forgotten what we didn't want to know. Our woodpile reminded us both: Dr. Sol-

veig had gone for more, nearly three quarters of an hour before.

And it was only a five-minute climb to the top of the crevasse.

THE MARTIANS. But, of course, we had to prove it for ourselves.

And prove it we did. At the expense of our weapons, our safe cave and fire, and very nearly our lives. We went racing up the ledge like twin whirligigs, bouncing in the light Martian gravity and nearly tumbling into the chasm at every step.

I suppose that if we thought at all, we were thinking that the more commotion we made, the more likely we were to scare the Martians off before they killed Dr. Solveig. We were yelling and kicking stones into the gorge with a bounce and clatter; and we were up to the top of the crevasse in a matter of seconds, up at the top—and smack into a trap. They were waiting for us up there, our first face-to-face Martians.

We could see them only as you might see ghosts in a sewer; the night was black, even the starlight half drowned by the branches overhead, but they seemed to gleam, phosphorescently, like decaying vegetation. And decay was a word that fitted the picture, for they looked like nothing so much as corpses.

They had no hands or arms, but their faces seemed vaguely human. What passed for ears were large and hung like a spaniel's; there were eyes, sunken but bright, and there was a mouth. They were human in size, human in the way they came threateningly toward us, carrying what must have been weapons.

Demaree's flame rifle flooded the woods with fire. He must have incinerated some of them, but the light was too blinding, we couldn't see. I fired close on the heels of Demaree's shot, and the two of us charged blindly into the dark.

There was light now from the blazes we had started, but the fires were Mars-fires, fitful, weak, and casting shadows that moved and disguised movement. We beat about the brush uselessly for a moment, then retreated to the lip of the crevasse. And that was a mistake.

"What about Solveig?" Demarce demanded. "Did you see anything..."

But he never got a chance to finish the sentence. On a higher cliff than ours there were scrabblings of motion, and boulders fell around us. We dodged back down the ledge, but we couldn't hope to get clear that way.

Demarce bellowed, "Come on, Will!" And he started up the ledge again, but the boulder

shower doubled and redoubled.

We had no choice so we trotted, gasping and frozen, back down to our cave, and ran in. And waited. It was not pleasant waiting. If the Martians showed up at the cave mouth, we were done. Because, you see, in our potshotting at the golden glow on the dunes and our starting a fire in the cave and salvoing the woods, we had been careless.

Our flame rifles were empty.

WE KEPT warm and worried all of that night, and in the light from our dwindling fire—only a couple of branches at a time—we could see a figure across the crevasse from us.

It was doing something complex with objects we could not recognize. Demaree, over my objections, insisted we investigate, and so we parted with a hoarded brand. We threw the tiny piece of burning wood out across the crevasse; it struck over the figure in a shower of sparks and a pale blue flame, and in the momentary light we saw that it was, indeed, a Martian. But we still couldn't see what he was doing.

The dawn wind came, the Martian stayed at his post, and then, at once, it was daylight.

We crept to the lip of the cave and looked out, not more than a dozen yards from the busy watching figure. The Martian looked up once, at us, as a busy cobbler might glance up from his last. And just as unemotionally, the Martian staring whitely across the ravine returned to what he was doing. He had a curious complex construction of sticks and bits of stone, or so it seemed from our distance. He was carefully weaving bits of shiny matter into it in a regular pattern.

Demaree looked at me, licking his lips. "Are you thinking what I'm thinking, Will?" he asked.

I nodded. It was a weapon of some sort, it couldn't be anything else. Perhaps it was a projector for the lightnings that blasted the sandcars or the golden glow that had struck down at us from the sand dunes, perhaps some even more deadly Martian device. But whatever it was, it was at pointblank range; and when he was finished with it, we were dead.

Demaree said thinly, "We've got to get out of here."

THE ONLY question was, did we have enough time? We scrabbled together our flame rifles and packs from the back of the cave and, eyes fearfully on the busy Martian across the chasm, leaped for the cave mouth just in time to see what seemed a procession coming down the other side. It was a



scrambling, scratching tornado, and we couldn't at first tell if it was a horde of Martians or a sandcar with the treads flapping. But then we got a better look.

And it was neither. It was Dr. Solveig.

The Martian across the way saw him as soon as we, and it brought that strange complex of



bits and pieces slowly around to bear on him. "Hey!" bellowed Demaree, and my yell was as loud as his. We had to warn Solveig of what he was running into.

But Solveig knew more than we. He came careening down the ledge across the crevasse, pausing only long enough to glance at us and at the Martian, and then came on again.

"Rocks!" bellowed Demaree in my ear. "Throw them!" And the two of us searched feverishly in the debris for rocks to hurl at the Martian, to spoil his aim.

We needn't have bothered. We could find nothing more deadly than pebbles, but we didn't need even them. The Martian made a careful, last-minute adjustment on his gadget, and poked it once, squeezed it twice and pressed what was obviously its trigger.

And nothing happened. No spark, no flame, no shot. Solveig came casually down on the Martian, unharmed.

Demaree was astonished, and so was I. But the two of us together were hardly as astonished as the Martian. He flew at his gadget like a tailgunner clearing a breech jam over hostile interceptors.

That was as far as he got with it, because Solveig had reached him and in a methodical, almost patronizing, way he kicked the Martian's gadget to pieces and called over to us, "Don't worry, boys. They won't hurt us here. Let's get back up on top."

Niobe, especially with the cumbersome gadgetry Solveig had found. A thing the size of a large machine gun, structurally

like the bits and pieces the Martian had put together, but made of metal and crystal instead of bits of rubble.

But we made it, all four of us. We had picked up Garcia at the stalled cars, swearing lividly in relief, but otherwise all right. Solveig wouldn't tell us much. He was right, of course. The important thing was to get back to Niobe as soon as we could with his gimmick. Because the gimmick was the Martian weapon that zeroed in on sandcars, and the sooner our mechanics got it taken apart, the sooner we would know how to defend ourselves against it.

We were breathless on the long run home, but we were exultant. And we had reason to be, because there was no doubt in any of our minds that a week after we turned the weapon over to the researchers we would be able to run sandcars safely across the Martian plains.

Actually it wasn't a week; it was less. The aiming mechanism was nothing so complex as radio; it was a self-aiming thermocouple, homing on high temperatures. We licked it by shielding the engines and trailing smokepots to draw fire.

Overconfident? No. Any Earthman, of course, could have worked out a variation which would have made the weapon useful again in an hour's leisurely thought. But Earthmen are flexible. And the Martians were not. Because the Martians were not Martians.

That is, they were not the Martians.

"Successors," Solveig explained to all of us, back in Niobe. "Heirs, if you like. But not the inventors. Compared with whoever built those machines, the Martians we've been up against are nothing but animals or children. Like children, they can pull a trigger or strike a match. But they can't design a gun or even build one by copying another."

Demaree shook his long, lean head. "And the original Martians?"

Solveig said, "That's a separate question. Perhaps they're hiding out somewhere we haven't reached—underground or at the poles. But they're master builders, whoever and wherever they are." He made a wry face. "There I was," he said, "hiding out in a cleft in the rock when the dawn wind came. I thought I'd dodged the Martians, but they knew I was there. As soon as the sun came up, I saw them dragging that thing toward me." He jerked a thumb at the weapon, already being checked over by our maintenance crews. "I thought that was the end, especially when they pulled the trigger."

"And it didn't go off," said Demaree.

"It couldn't go off! I wasn't a machine. So I took it away from them—they aren't any stronger than kittens—and I went back to look for you two. And there was that Martian waiting for you. I guess he didn't have a real gun, so he was making one, the way a kid'll make a cowboy pistol out of two sticks and a nail. Of course, it won't shoot. Neither did the Martians', as you noted."

We all sat back and relaxed. "Well," said Demaree, "that's our task for this week. I guess you've shown us how to clean up what the Earthside papers call the Martian Menace, Doc. Provided, of course, that we don't run across any of the grownup Martians or the real Martians or whatever it was that designed those things."

Solveig grinned. "They're either dead or hiding, Demarce," he said. "I wouldn't worry about them."

And unfortunately, he didn't worry about them, and neither did any of the rest of us.

Not for nearly five years. . . —FREDERIK POHL

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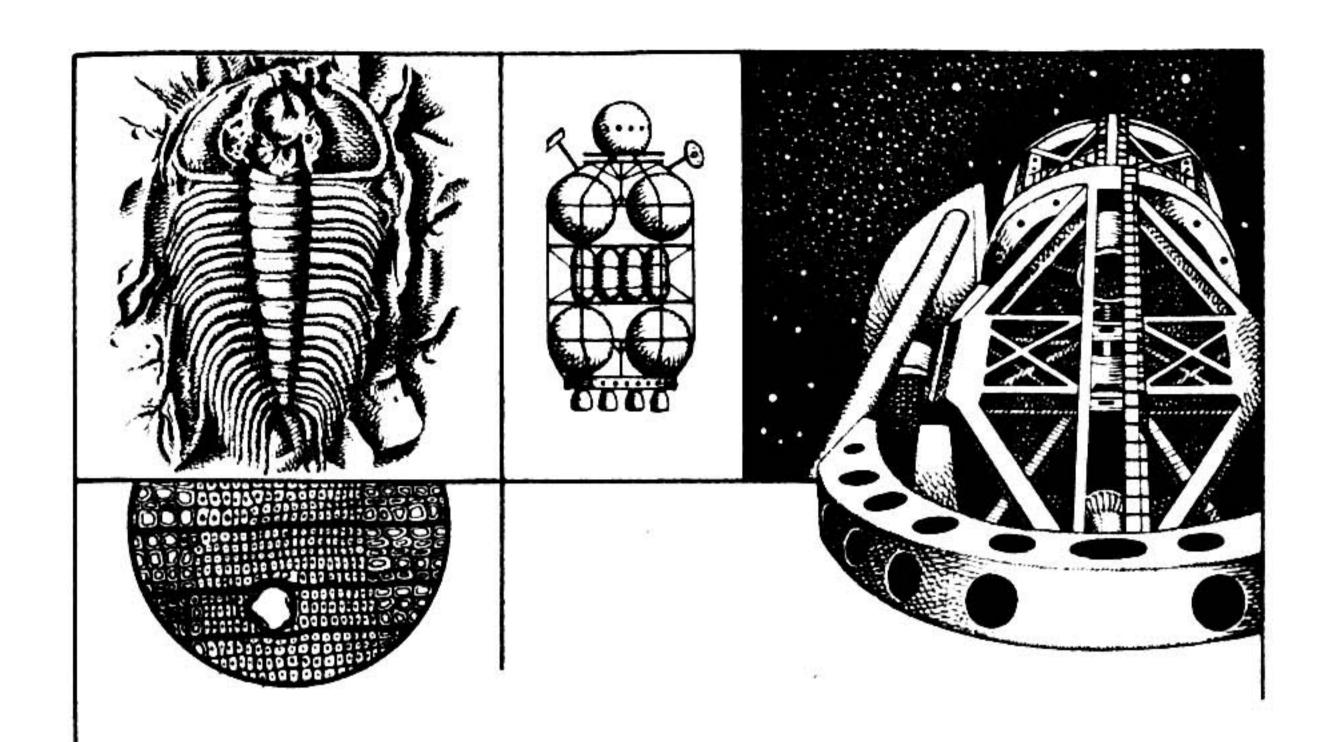
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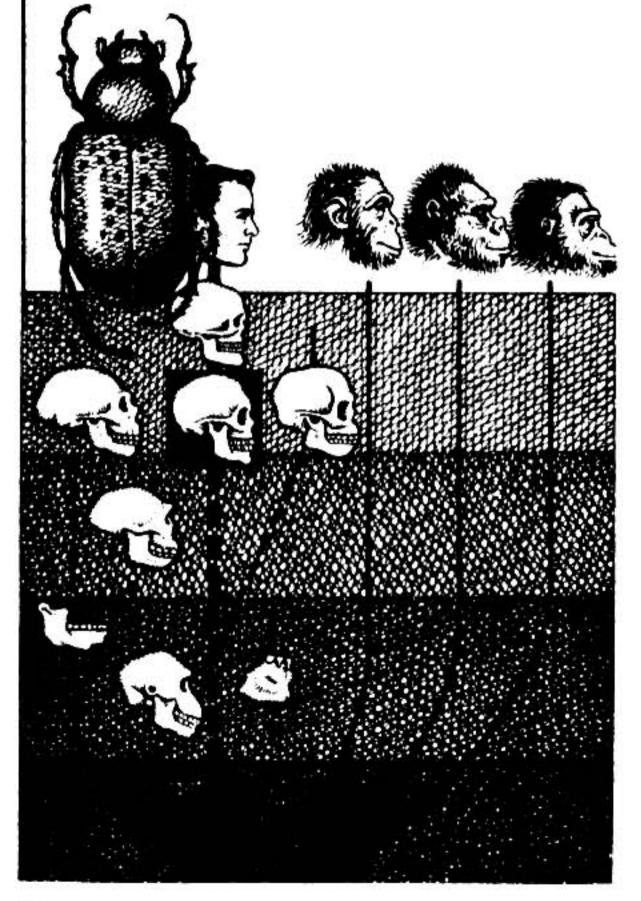
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By WILLY LEY



"MIDNIGHT MARVELS"

N some of the editorial offices of the large-circulation "slick" magazines, you are likely to bump into two editorial policies which sound about as follows: First of all, you must never write about things, but only about people, for "things" are not interesting, while people are.

The example that comes to my mind whenever I hear this is the case of Professor Dr. Wilhelm

Konrad Röntgen and the X-ray tube. The device itself is as fascinating as any device can be, but it was discovered by a thoroughly "routine" professor, undistinguished in every respect up to the time when he made his discovery which, incidentally, was fairly late in his life. The biographers of Professor Röntgen have always had a hard time finding something to say about the man—not something fascinating (that doesn't exist), but something, anything, that could be said about him rather than his discovery and its consequences.

The second editorial policy—the art editor is not permitted to voice a dissenting view—is based on the assumption that, although much effort and money have been spent on colorful and painstaking illustrations, the reader of the magazine has not looked at the pictures before he started reading.

Disbelieving both these premises, I am going to write about "things"—animals—and any mention of people will be purely accidental and can be skipped. I am also convinced that every reader has by now looked at the "monsters" and is wondering what I have to say about them. Well, aren't you? In your place, I would. All right, then, let's proceed.

THE time was 1545. The place was the city of Frankfurt on the Main, more particularly the office of Herr Cyriacus Jacobus, a printer. There was a manuscript on the table, which was in German and not in Latin, as would have been more likely for the time. However, this deficiency was partly made up by the fact that it was a translation from the Latin.

The original author had been the Doctor universalis Albert von Bollstädt, better known as Albertus Magnus. He had been a contemporary of Roger Bacon; in fact, the two managed to respect each other without being in the least friendly. Unlike Roger Bacon, Albertus Magnus never got into any trouble with his ecclesiastical superiors. He also wrote far more than Bacon; the first printed edition of his works filled 21 folio volumes.

One of them had been about animals, written around 1250. Now, in 1545, a Walther Ryff had translated this book into German and Cyriacus Jacobus was willing to print it—but not without illustrations. The public would prefer an illustrated book and, since woodcuts could be printed like type, there had to be woodcuts, which meant finding an artist to draw the pictures.

The trouble began at that point. Albertus had traveled

widely; to find an equally traveled artist was not easy. Besides, a description of something is one thing and a picture of something is a different story. The artist who was picked had only a manuscript to work from, nothing else. If, right now, I called on my wife Olga for a drawing of an African elephant, say, she'd pick a minimum of seven books off the shelves, with photographs of African elephants in all conceivable positions fit to print. She'd study a painting by Wilhelm Kuhnert, who had lived in Africa for the purpose of painting African wild life. Moreover, she has seen African elephants in assorted zoological gardens.

The artist who had to illustrate Ryff's translation of the animal book by Albertus Magnus had just a manuscript. There was mention of a bird the size of a chicken, which was called Lagephus. The manuscript stated that Pliny the Elder had called this bird Lagopus. This means "harefooted" and the real reason had been that the legs of this bird look as if hare's fur grew on them. To the artist, the idea of a bird with a hare's feet did not make much sense. But if the learned Pliny had used such a term, there had to be a reason; maybe the bird had other characteristics of a hare.

The result was our Fig. 1.



Fig. 1. This is the bird Lagephus . . .

THEN there was a paragraph saying "there is a fish in the seas that has eight feet, hence it is called octopus, which means 'eight feet.' "Yes, it does, but you cannot imagine an octopus unless you have seen one. So the fish with eight feet turned out as shown in Fig. 2.

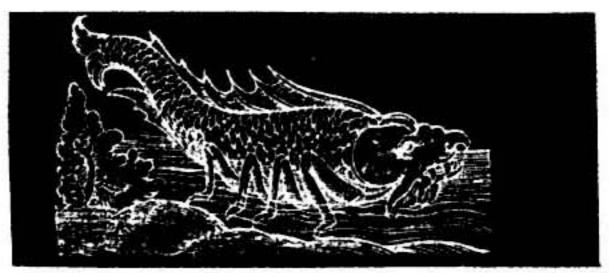


Fig. 2. . . . while this is an "octopus"

One picture (Fig. 3) might have defied guessing for a long

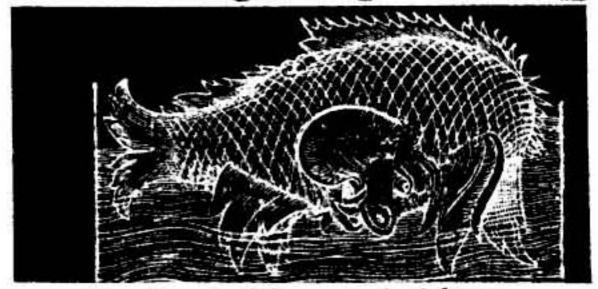


Fig. 3. A fish named Echinus

time if the name had not given the misunderstanding away. The text reads: "Erinus is a fish in the seas that has its head and mouth turned down below and carries the gateway for the excrements on top above; it walks by means of its spines, which it uses like feet." You won't catch on unless the word erinus reminds you of the zoological term echinodermata or, more specifically, the class of the echinoidea, the sea urchins. The description then makes sense; the picture is a fine example of good will and confusion.

At that same time, there lived a French scientist named Guillaume Rondelet. By profession, he was a physician; by avocation, a zoologist who was especially interested in the fishes of the Mediterranean Sea. In his book, Rondelet presented Fig. 4 and 5, with protestations that he had

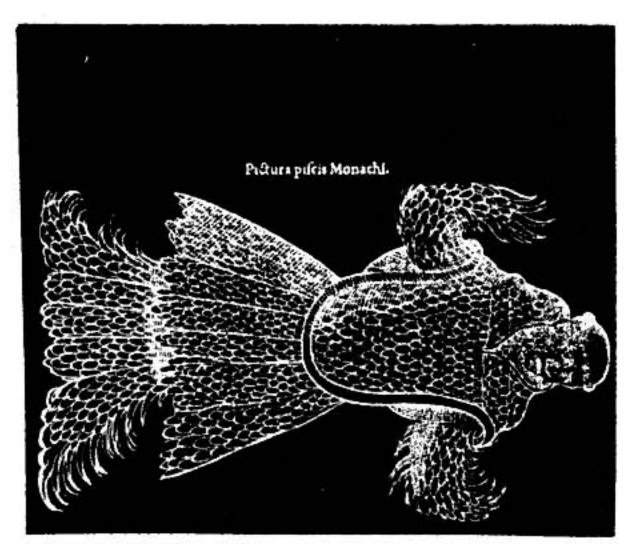


Fig. 4. Truthful picture of a sea monk . . .

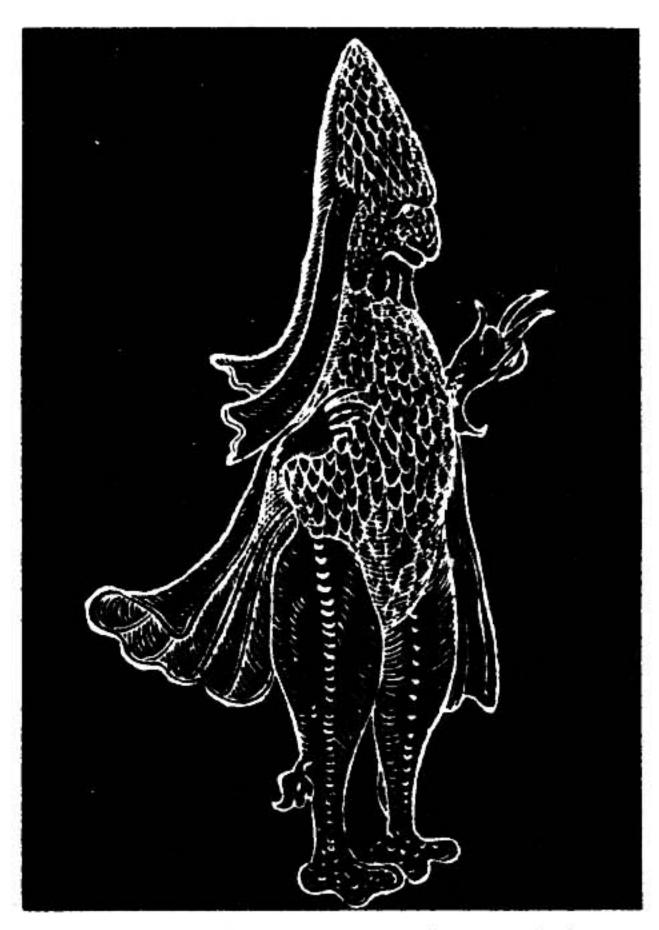


Fig. 5. ... and his superior, the sea bishop

not seen these two marvels of the sea himself, but was merely showing what had come to him from the places where the events were alleged to have taken place. The "sea monk" was supposed to have been washed ashore on the Norway coast after a violent storm. The "sea bishop" was reported to have appeared at the shore of the Baltic along a then Polish portion of the coast in 1531.

The artist who drew the picture of the "sea monk" should be given some benefit of the doubt; he may have been sincere. When

this picture is reproduced, it is usually printed in such a way that the "sea monk" stands on his feet and the original Latin title is erased, since it would seem to interfere.

But when you look at it in the position used here, you begin to see that this might be a formalized picture of an octopus or of a squid. If one man sketched the squid as it was lying—dead or almost dead—at the seashore and another artist then tried to "clean up" the sketch, this picture might well be the result.

S for the "sea bishop," I take A him to be a Jenny Haniver -a "willful and premeditated" distortion of a ray. During the time mentioned in the story, quite a number of people living at the seashore amused themselves by skillful distortion of rays, which were then dried and sold to the type of customer that even then was born at the rate of one per minute, as "dead basilisks," "dried young dragons" or as whatever else would bring money. The practice of making the things that were later called Jenny Hanivers (nobody knows why) must have been widespread then, for Konrad Gesner of Zürich, in his Book of Fishes (1558), pictured one for the sole purpose of exposing "the wandering apothecaries and other peddlers who show such shams to the ignorant."

But it was Konrad Gesner himself and on the very occasion of compiling his Book of Fishes who had trouble. He knew that there were gigantic "fish" in the seas—the whales—and he had to include them. There were numerous pictures that Gesner did not believe by any means, but they were source material and they were backed by Olaus Magnus of Upsala in Sweden.

Olaus Magnus had been a churchman, an archbishop and even the Metropolitan of all Sweden. He could not simply be called a liar. Besides, Gesner realized that he, living in Switzerland, could not really judge things of the seas. So he repeated the pictures, letting Olaus Magnus bear all the responsibility.

The contemporaries even had a special derisive term for them: "Olaus' Midnight Marvels."

We now know that Olaus did recount tall tales, but as regards those pictures, there is some repetition of the case of the pictures in Ryff. The artist had been confronted with "a fish in the seas that is called the marine unicorn." It was really great restraint not to picture the whole marine unicorn, modeled either on the traditional heraldic unicorn or the fish that had been served for supper the night before. He only pictured the head

(Fig. 6), however. What was really meant was, of course, the narwhal. He exercised similar restraint in the case of the "sea cow" (Fig. 7), which, in all probability, referred to marine mammals of the type of the dugong and manatee.



Fig. 6. The marine Unicorn



Fig. 7. The sea cow

WHEN it came to whales, restraint would have been unwise. There were lots of tales about spouting gigantic monsters, bigger than the whaling ship (not impossible, or not noticeably exaggerated, considering the size of ships then in use), which were eager to attack, but might be successfully diverted by throw-

ing empty barrels overboard.

Fig. 8 shows such a scene while Fig. 9 illustrates an old story that had been around since Roman times and had made its appearance in such widely different places as the tales of Sindbad the Sailor and Norse folklore; namely, of the sleeping sea monster mistaken for an island so that the ship drops anchor and men go ashore to make a fire for cooking.

Fig. 10 shows the flensing of a whale (with bagpipe music) and is the most realistic of the whole batch. That fact is easily explained. The flensing of a whale washed ashore is the one aspect of whaling the artist could actually have watched.

Fig. 11 is strictly a "bonus" for those of my readers who like riddles. It is from Gesner's book; Gesner said that Olaus Magnus pictured it sine nomine—without giving it a name. Gesner, therefore, did not know what it was or what it was supposed to be. Neither do I. Nor have I found a guess about it anywhere else. But it certainly would ruin all theories about naval architecture and shipbuilding if it were true.

SUCH things could happen in 1450 and even in 1550. But then people grew more careful.

Possibly.

The unfortunate fact is that



Fig. 8. Whales on the attack



Fig. 9. The sea monster resembling an island

you can be careful and still make mistakes, especially if you venture into a completely new field.

There is the case of the bones of the Zeunickenberg, a small mountain—hill would be a better term—near the German city of Quedlinburg. Local peasants had told of big bones half buried there. One day in 1663, an enterprising man by the name of Otto von Guericke—now mostly re-

membered as the inventor of the air pump—started digging in that area. There were bones and teeth, so the peasants had spoken the truth. But what had these bones been when still alive?

Otto von Guericke decided that it may have been a unicorn. And he put the bones together into the shape shown in Fig. 12. The picture has been preserved only because it was published by Leib-



Fig. 10. Flensing a whale

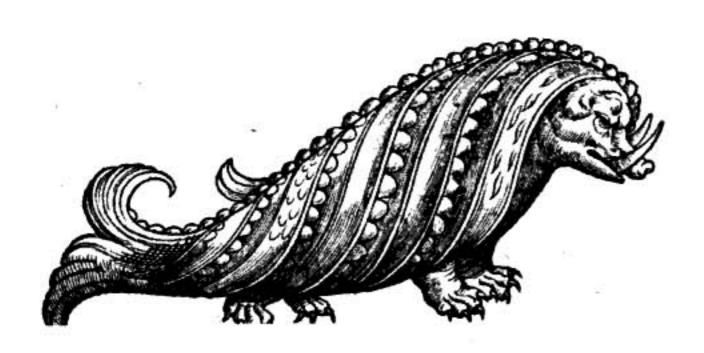


Fig. 11. The "Bonus"—a really fine example of Olaus' Midnight Marvels

nitz in 1749 in his work *Proto*gaea, almost a century after the excavation.

Although the bones themselves have been lost, mislaid or discarded in the meantime, we can tell what they really were. The big tooth is very clearly a molar of a woolly mammoth and the other bones, allowing for some breakage, probably were, too.

It was only natural that the pioneers of the new science of paleontology, who began groping

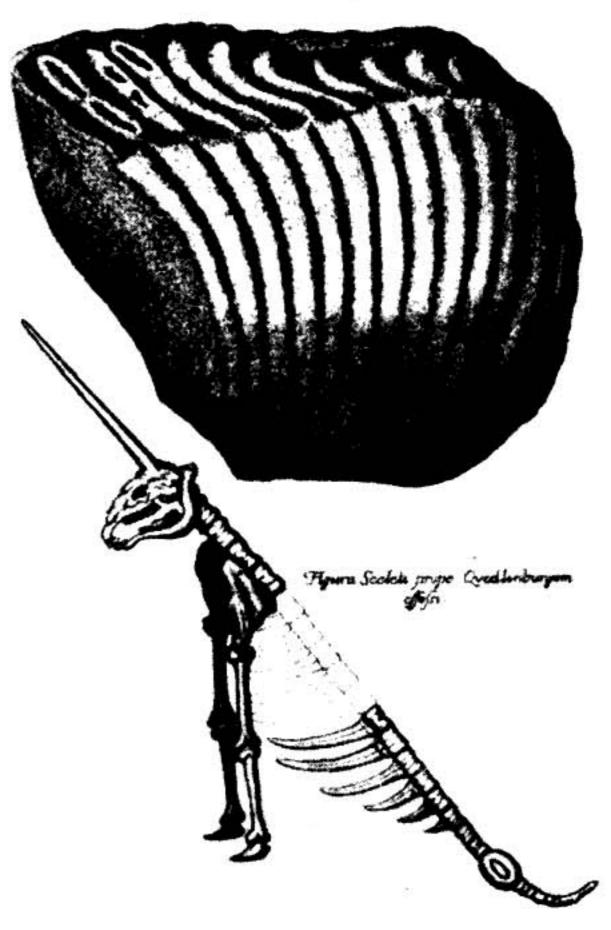


Fig. 12. Otto von Guericke's "unicorn"

their way into the distant past during the later part of the 18th century, would repeat some of the mistakes zoologists had made three centuries earlier.

In 1784, a scientist by the name of Collini came across an interesting fossil that had just been found in the lithographic slate of Eichstätt in Franconia. The fossil was in rather good condition.

There was a head with enormously long jaws, bearing comparatively few and small teeth. There were the vertebrae of a long, thin neck. There were the vertebrae and a few ribs of a small body, the well-preserved remains of a birdlike leg and foot and the less well-preserved remains of the other. And there were the bones of the "forelegs," quite clear and also quite large.

The problem was how all this had functioned when the animal was still alive.

Collini did not commit himself too much; he gave a careful description of the find and referred to it as the "unknown marine animal." The word "marine" crept in, I should think, because the fossils of the lithographic slate are (with a very few but also very important exceptions) decidedly marine in character, like crabs, fishes, sea lillies, etc.

Some twenty years after the discovery, a Professor Hermann

in Strasbourg suggested to the great Georges Cuvier in Paris that he study this fossil. Cuvier did and realized that he was looking at what must once have been a flying reptile.

It was the first known to science and Cuvier named it *Ptero*dactylus.

CUVIER'S ability to recognize something that had no living counterpart was superlative—but he could not convince his fellow scientists in a hurry. They simply did not take to the idea of a flying reptile. Birds could fly and so could bats, but flying reptiles?

Hence, Prof. Johannes Wagler reasoned—as late as 1830 and after Cuvier's third publication on the subject—that Collini had probably been right with his term "marine animal" and he reconstructed pterodactylus as shown in Fig. 13. Just how "pectoral fins" of such disproportionate size could operate is something he never explained. But he would not have liked the modern concept (Fig. 14) of how pterodactylus looked and behaved.

Just as there is no true flying reptile around any more, there is no known living reptile that habitually walks on its hind legs only. The Australian lizard Chlamydosaurus does it when in

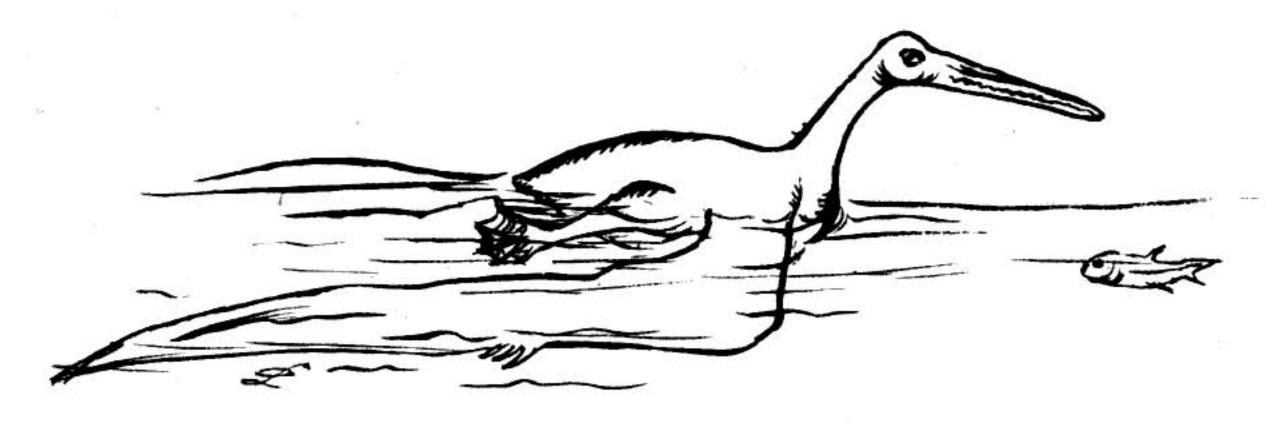


Fig. 13. Collini's "unknown marine animal"

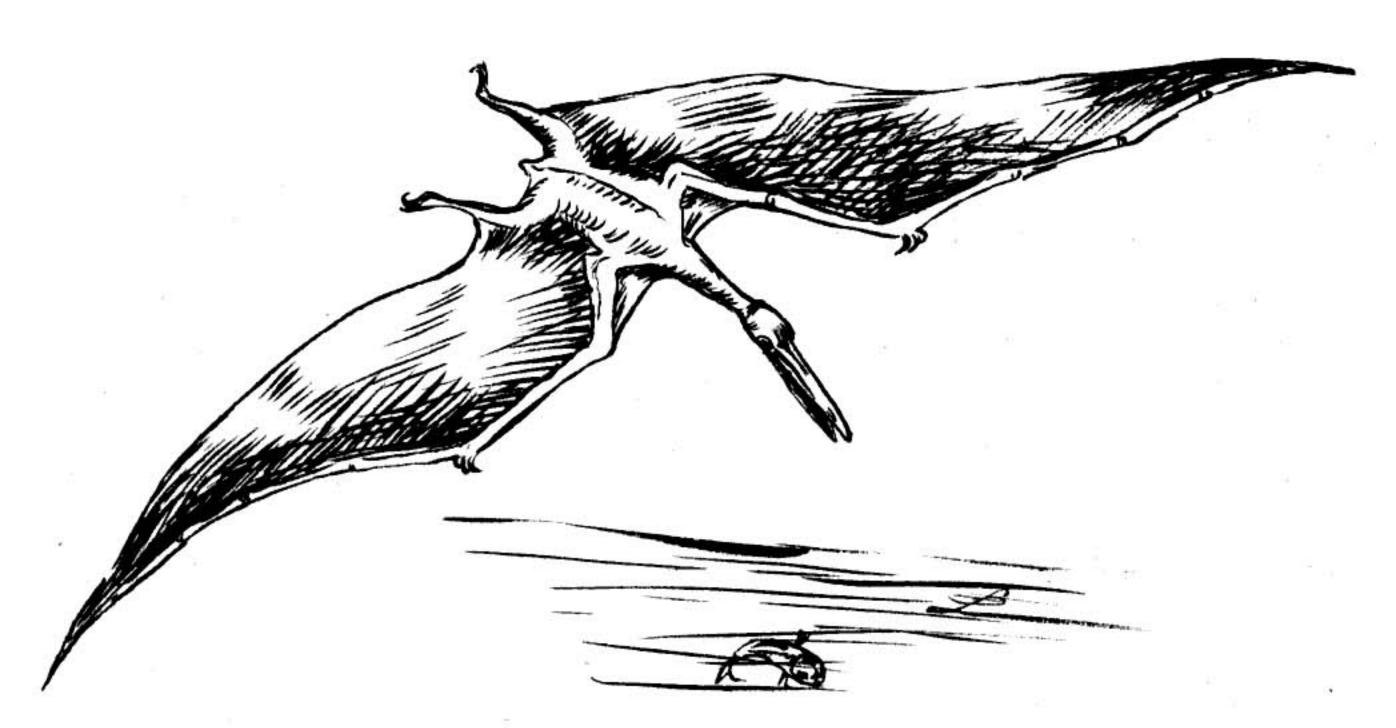


Fig. 14. Pterodactylus from the Jurassic Period

a hurry and some of the Old World monitor lizards and of the New World iguanas have been seen to do the same. But none walk around on their hind legs in the manner of an ostrich. In the geologic past, many large reptiles did just that; Iguanodon comes to mind quickly as a classical example. However, when its

first remains came to light, the fact that many dinosaurs had a bipedal walk was not yet known. And iguanodon itself was slow to reveal it, for what was first found of it were just a few teeth.

Here Cuvier made a mistake; he thought they had belonged to a rhinoceros. It was Gideon Mantell in England who saw that the



Fig. 15. Iguanodon, first guess

teeth from the past resembled the teeth of the living iguanas and concluded that the original owner had been a very large reptile of plant-eating habits.

Then a few bones were found, a piece of the skull and a strange bony spike, like a straight horn. (They also found large three-toed footprints, but they did not know yet that these were made by iguanodon.)

Gideon Mantell was especially happy about this horn, which, incidentally, had been found by his wife. The teeth were rather similar to those of the living iguanas and some of the living iguanas carry a small horn on the tip of their noses. Here was proof that the extinct and mighty iguanodon had also possessed a nose horn. Mantell even developed an idea of "necessary resemblances," which he termed the "law of correlation."

picture. An artist by the name of John Martin sketched something like a very large and overstuffed iguana. Since the

hind legs were not yet known, the feet turned out to resemble those of a bear. The front feet, partly known then, ditto. The tail was made short and plump, the neck likewise. The head was largely fantasy, but Mrs. Mantell's bony spike was placed on the nose.

This was in 1838.

A few years later, plans for the Crystal Palace began to take shape and, since "the gigantic animals of the past" had just become fashionable, they had to be there, too. The sculptor Waterhouse Hawkins was commissioned to put "life size" statues of some in the garden of the Crystal Palace. Even considering the knowledge of the time, he did a very poor job (Fig. 15).

A critic of the time wrote, especially about the iguanodon, that this was an inexplicable whim of the scientists who draw pictures of animals they cannot possibly believe themselves. It would be interesting to confront this critic with a picture of iguanodon as it actually looked. (Fig. 16.)

Iguanodon was admittedly a rather specialized character, as could easily be seen when, in 1878, more than a dozen complete and well-preserved skeletons were discovered in the Sainte Barbe mine near Bernissart in Belgium. Walking upright on three-toed hind feet, it carried its head high

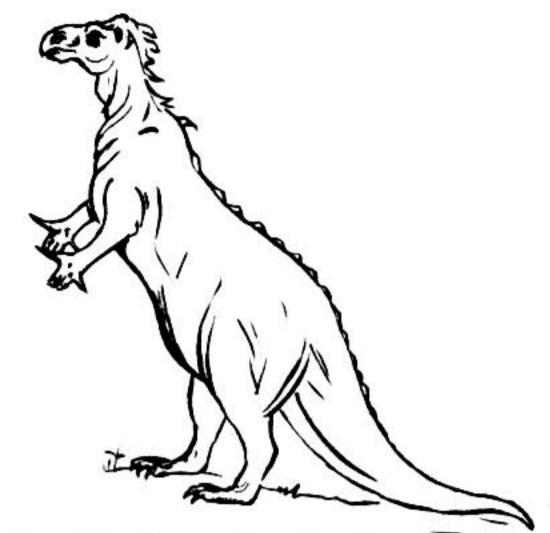


Fig. 16. Iguanodon bernissartensis

and the beak must have looked like that of an enormous turtle.

It was hornless. The alleged horn was found to be something else entirely that could not possibly have been guessed.

The spike was actually the thumb of iguanodon. Its front feet greatly resembled human hands, but with both thumbs converted into enormous immovable daggers. To substitute for the immobilized thumb, the "little finger" had become opposable. We aren't sure yet whether the other three fingers were movable; it seems likely.

Little remains to be added, but I can't help thinking of something Sir Winston Churchill once said. Speaking of political mistakes of the past, he declared: "These mistakes will not be repeated; we'll probably make our own set of mistakes."

I'm afraid this is applicable in science, too. —WILLY LEY



Sam had led a peaceful and impecunious life —until a voice cut in on a phone and said:

Sam, this is You

By MURRAY LEINSTER

Illustrated by MEL HUNTER

believe this story, and if you ask Sam Yoder about it, he is apt to say that it's all a lie. But Sam is a bit sensitive about it. He does not want the question of privacy to be raised again—especially in Rosie's hearing. And there are other matters. But it's all perfectly respectable and straightforward.

It could have happened to anybody—well, almost anybody. Anybody, say, who was a telephone lineman for the Batesville and Rappahannock Telephone Company, and who happened to be engaged to Rosie, and who had been told admiringly by Rosie that a man as smart as he



was ought to make something wonderful of himself. And, of course, anybody who'd taken that seriously and had been puttering around on a device to make private conversations on a party-line telephone possible, and almost had the trick.

It began about six o'clock on July second, when Sam was up a telephone pole near Bridge's Run. He was hunting for the place where that party line had gone dead. He'd hooked in his lineman's phone and he couldn't raise Central, so he was just going to start looking for the break when his phone rang back, though the line had checked dead.

Startled, he put the receiver to his ear. "Hello. Who's this?"

"Sam, this is you," a voice replied.

"Huh?" said Sam. "What's that?"

"This is you," the voice on the wire repeated. "You, Sam Yoder. Don't you recognize your own voice? This is you, Sam Yoder, calling from the twelfth of July. Don't hang up!"

SAM hadn't even thought of hanging up. He was annoyed. He was up a telephone pole, trying to do some work, resting in his safety belt and with his climbing irons safely fixed in the wood. Naturally, he thought

somebody was trying to joke with him, and when a man is working is no time for jokes.

"I'm not hanging up," said Sam dourly, "but you'd better!"

The voice was familiar, though he couldn't quite place it. If it talked a little more, he undoubtedly would. He knew it just about as well as he knew his own, and it was irritating not to be able to call this joker by name.

The voice said, "Sam, it's the second of July where you are, and you're up a pole by Bridge's Run. The line's dead in two places, else I couldn't talk to you. Lucky, ain't it?"

"Whoever you are," Sam said formidably, "it ain't going to be lucky for you if you ever need telephone service and you've kept wasting my time. I'm busy!"

"But I'm you!" insisted the voice persuasively. "And you're me! We're both the same Sam Yoder, only where I am, it's July twelfth. Where you are, it's July second. You've heard of time-traveling. Well, this is time-talking. You're talking to yourself—that's me—and I'm talking to myself—that's you—and it looks like we've got a mighty good chance to get rich."

Then something came into Sam's memory and every muscle in his body went taut and tight, even as he was saying to himself, "It can't be!"

But he'd remembered that if a man stands in a corner and talks to the wall, his voice will sound to him just the way it sounds to somebody else. Being in the telephone business, he'd tried it and now he did recognize the voice. It was his. His own. Talking to him. Which, of course, was impossible.

"Look," said hoarsely, "I don't believe this!"

"Then listen," the voice said briskly. And Sam's face grew red. It burned. His ears began to feel scorched. Because the voice—his voice—was telling him strictly private matters that nobody else in the world knew. Nobody but himself and Rosie.

"Quit it!" groaned Sam. "Somebody might be listening! Tell me what you want and ring off!"

The voice told him what it wanted. His own voice. It sounded pleased. It told him precisely what it wanted him to do. And then, very kindly, it told him exactly where the two breaks in the line were. And then it rang off.

The sweated when he looked at the first of the two places. A joining was bad and he fixed that. It was where his voice had said it would be. And that was as impossible as anything else.

When he'd fixed the second break, Sam called Central and

told her he was sick and was going home, and that if there were any other phones that needed fixing today, people were probably better off without phone service, anyhow.

He went home and washed his face, and made himself a brew of coffee and drank it, and his memory turned out to be unimpaired. Presently he heard himself muttering.

So he said defiantly, "There ain't any crazy people in my family, so it ain't likely I've gone out of my head. But God knows nobody but Rosie knows about me telling her sentimental that her nose is so cute, I couldn't believe she ever had to blow it! Maybe it was me, talking to myself!"

Talking to oneself is not abnormal. Lots of people do it. Sam missed out the conclusion to be drawn from the fact that he'd answered himself back.

He reasoned painfully, "If somebody drove over to Rappahannock, past Dunnsville, and telephoned back that there was a brush fire at Dunnsville, I wouldn't be surprised to get to Dunnsville and find a brush fire there. So if somebody phones back from next Tuesday that Mr. Broaddus broke his leg next Tuesday—why, I shouldn't be surprised to get to next Tuesday and find he done it. Going to Rappa-

hannock, past Dunnsville, and going to next Thursday, past next Tuesday, ain't so much difference. It's only the difference between a road-map and a calendar."

Then he began to see implications. He blinked.

"Yes, sir!" he said in awe. "I wouldn't've thought of it if I hadn't told myself on the telephone, but there is money to be made out of this! I must be near as smart as Rosie thinks I am! I'd better get that dinkus set up!"

He'd more or less half-heartedly worked out an idea of how a party-line telephone conversation could be made private, and just out of instinct, you might say, he'd accumulated around his house a lot of stuff that should have been on the phone company's inventory. There were conand transmitters densers and selective-ringing bells and resistances and the like. He'd meant to put some of them together some day and see what happened, but he'd been too busy courting Rosie to get at it.

Now he did get started. His own voice on the telephone had told him to. It had warned him that one thing he had intended wouldn't work and something else would. But it was essentially simple, after all. He finished it and cut off his line

from Central and hooked this gadget in. He rang. Half a minute later, somebody rang back.

"Hello!" said Sam, quivering. He'd broken the line to Central, remember. In theory, he shouldn't have gotten anybody anywhere. But a very familiar voice said "Hello" back at him, and Sam swallowed and said, "Hello, Sam. This is you in the second of July."

The voice at the other end said cordially that Sam had done pretty well and now the two of them—Sam in the here and now and Sam in the middle of the week after next—would proceed to get rich together. But the voice from July twelfth sounded less absorbed in the conversation than Sam thought quite right. It seemed even abstracted. And Sam was at once sweating from the pure unreasonableness of the situation and concious that he rated congratulation for the highly technical device he had built. After all, not everybody could build a time-talker!

He said with some irony, "If you're too busy to talk—"

"I'll tell you," replied the voice from the twelfth of July, gratified. "I am kind of busy right now. You'll understand when you get to where I am. Don't get mad, Sam. Tell you what—you go see Rosie and tell her about this and have a nice evening. Ha-ha!"

"Now what," asked Sam cagily, "do you mean by that 'haha'?"

"You'll find out," said the voice. "Knowin' what I know, I'll even double it. Ha-ha, ha-ha!"

There was a click. Sam rang back, but got no answer. He may have been the first man in history to take an objective and completely justified dislike to himself.

But presently he grumbled, "Smart, huh? Two can play at that! I'm the one that's got to do things if we are both goin' to get rich."

He put his gadget carefully away and combed his hair and ate some cold food around the house and drove over to see Rosie. It was a night and an errand which ordinarily would seemed purely romantic. There were fireflies floating about, and the Moon shone down splendidly, and a perfumed breeze carried mosquitoes from one place to another. It was the sort of night on which, ordinarily, Sam would have thought only of Rosie, and Rosie would have optimistic ideas about how housekeeping could, after all, be done on what Sam made a week.

They got settled down in the hammock on Rosie's front porch, and Sam said expansively, "Rosie, I've made up my mind to get rich. You ought to have everything your little heart de-

sires. Suppose you tell me what you want so I'll know how rich I've got to get."

ROSIE drew back. She looked sharply at Sam. "Do you feel all right?"

He beamed at her. He'd never been married and he didn't know how crazy it sounded to Rosie to be queried on how much money would satisfy her. There simply isn't any answer to the question.

"Listen," said Sam tenderly. "Nobody knows it, but tonight Joe Hunt and the Widow Backus are eloping to North Carolina to get married. We'll find out about it tomorrow. And day after tomorrow, on the Fourth of July, Dunnsville is going to win the baseball game with Bradensburg, seven to five, all tied till the ninth inning, and then George Peeby is going to hit a homer with Fred Holmes on second base."

Rosie stared at him. Sam explained complacently. The Sam Yoder in the middle of the week after next had told him what to expect in those particular cases. He would tell him other things to expect. So Sam was going to get rich.

Rosie said, "Sam! Somebody was playing a joke on you!"

"Yeah?" Sam answered comfortably. "Who else but me knows what you said to me that time you thought I was mad at you and you were crying out back of the well-house?"

"Sam!"

"And nobody else knows about that time we were picnicking and a bug got down the back of your dress and you thought it was a hornet."

"Sam Yoder!" wailed Rosie.
"You never told anybody about that!"

"Nope," said Sam truthfully.
"I never did. But the me in the week after next knew. He told me. So he had to be me talking to me. Couldn't've been anybody else."

Rosie gasped. Sam explained all over again. In detail. When he had finished, Rosie seemed dazed.

Then she said desperately, "Sam! Either you've t-told some-body else everything we ever said or did together, or else—there's somebody who knows every word we ever said to each other! That's awful! Do you really and truly mean to tell me—"

"Sure I mean to tell you," said Sam happily. "The me in the week after next called me up and talked about things nobody knows but you and me. Can't be no doubt at all."

Rosie shivered. "He—he knows every word we ever said! Then he knows every word we're saying now!" She gulped. "Sam Yoder, you go home!"

Sam gaped at her. She got up and backed away from him.

"D-do you think," she chattered despairingly, "that I—that I'm g-going to talk to you when s-somebody else—listens to every w-word I say and—knows everything I do? D-do you think I'm going to m-marry you?"

Then she ran away, weeping noisily, and slammed the door on Sam. Her father came out presently, looking patient, and asked Sam to go home so Rosie could finish crying and he could read his newspaper in peace.

ON the way back to his own house, Sam meditated dark-ly. By the time he got there, he was furious. The him in the week after next could have warned him about this!

He rang and rang and rang, on the cut-off line with his gadget hooked in to call July the twelfth. But there was no answer.

When morning came, he rang again, but the phone was still dead. He loaded his tool-kit in the truck and went off to work, feeling about as low as a man could feel.

He felt lower when he reported at the office and somebody told him excitedly that Joe Hunt and the Widow Backus had eloped to North Carolina to get married. Nobody would have tried to stop them if they had prosaically gotten married at home, but they had eloped to make it more romantic.

It wasn't romantic to Sam. It was devastating proof that there was another him ten days off, knowing everything he knew and more besides, and very likely laughing his head off at the fix Sam was in. Because, obviously, Rosie would be still more convinced when she heard this news. She'd know Sam wasn't crazy or the victim of a practical joke. He had told the truth.

It wasn't the first time a man got in trouble with a woman by telling her the truth, but it was new to Sam and it hurt.

He went over to Bradensburg that day to repair some broken lines, and around noon, he went into a store to get something to eat. There were some local sportsmen in the store, bragging to each other about what the Bradensburg baseball team would do to the Dunnsville nine.

Sam said peevishly, "Huh! Dunnsville will win that game by two runs!"

"Have you got any money that agrees with you?" a local sportsman demanded pugnaciously. "If you have, put it up and let somebody cover it!"

Sam wanted to draw back, but he had roused the civic pride of Bradensburg. He tried to temporize and he was jeered at. In the end, philosophically, he dragged out all the money he had with him and bet it—eleven dollars. It was covered instantly, amid raucous laughter. And on the way back to Batesville, he reflected unhappily that he was going to make eleven dollars out of knowing what was going to happen in the ninth inning of that ball game, but probably at the cost of losing Rosie.

HE tried to call his other self that night again. There was no more answer than before. He unhooked the gadget and restored normal service to himself. He rang Rosie's house. She answered the phone.

"Rosie," Sam asked yearningly, "are you still mad at me?"

"I never was mad at you," said Rose, gulping. "I'm mad at whoever was talking to you on the phone and knows all our private secrets. And I'm mad at you if you told him."

"But I didn't have to tell him! He's me! All he has to do is just remember! I tried to call him last night and again this morning," he added bitterly, "and he don't answer. Maybe he's gone off somewheres. I'm thinking it might be a—a kind of illusion, maybe."

"You told me there'd be an elopement last night," retorted Rosie, her voice wobbling, "and

there was. Joe Hunt and the Widow Backus. Just like you said!"

"It—it could've been a coincidece," suggested Sam, not too hopefully.

"I'm — w-waiting to see if Dunnsville beats Bradensburg seven to five tomorrow, tied to the ninth, with George Peeby hitting a homer then with Fred Holmes on second base. If—if that happens, I'll—I'll die!"

"Why?" asked Sam.

"Because it'll mean that I can't m-marry you ever, because somebody else'd be looking over your shoulder— and we wouldn't ever be by ourselves all our lives—night or day!"

She hung up, weeping, and Sam swore slowly and steadily and with venom while he worked to hook up his device again—which did not make a private conversation on a party line, but allowed a man to talk to himself ten days away from where he was. And then Sam rang, and rang, and rang, and rang, and rang. But he got no answer.

The following day, in the big fourth of July game, Dunnsville beat Bradensburg seven to five. It was tied to the ninth. Then George Peeby hit a homer, with Fred Holmes on second base. Sam collected his winnings, but grimly, without joy.

He stayed home that night, worrying, and every so often trying to call himself up on the device he had invented and been told—by himself—to modify. It was a nice gadget, but Sam did not enjoy it. It was a nice night, too. There was moonlight. But Sam did not enjoy that, either.

Moonlight wouldn't do Sam any good so long as there was another him in the middle of the week after next, refusing to talk to him so he could get out of the fix he was in.

PEXT morning, though, the phone woke him. He swore at it out of habit until he got out of bed, and then he realized that his gadget was hooked in and Central was cut off. He made it in one jump to the instrument.

"Hello!"

"Don't fret," said his own voice patronizingly. "Rosie's going to make up with you."

"How in blazes d'you know what she's going to do?" raged Sam. "She won't marry me with you hanging around! I've been trying to figure out a way to get rid of you—"

"Quiet!" commanded the voice on the telephone irritably. "I'm busy. I've got to go collect the money you've made for us."

"You collect money? I get in trouble and you collect money?"

"I have to," his voice said with the impatient patience of one speaking to a small idiot child, "before you can have it. Listen here. Where you are, it's Wednesday. You're going over to Dunnsville today to fix some phones. You'll be in Mr. Broaddus' law office about half-past ten. You look out the window and notice a fella setting in a car in front of the bank. Notice him good!"

"I won't do it," said Sam defiantly. "I ain't taking any orders from you! Maybe you're me, but I make money and you collect it. For all I know you spend it before I get to it! I'm quitting this business right now. It's cost me my own true love and all my life's happiness and to hell with you!"

"You won't do it?" his own voice asked nastily. "Wait and see!"

So, that morning, the manager told Sam, when he reported for work, to drive over to Dunnsville and check on some lines there. Sam balked. He said there were much more important lines needing repair elsewhere. The manager explained politely to Sam that Mr. Broaddus over in Dunnsville had been taken drunk at a Fourth of July party and fallen out of a window. He'd broken his leg, so it was a Christian duty to make sure he had a telephone in working order in his office, and Sam could get over there right away or else.

On the way to Dunnsville, Sam morosely remembered that he'd

known about Mr. Broaddus' leg. He had told himself about it on the telephone.

At half-past ten, he was fixing Mr. Broaddus' telephone when he remembered about the man he was supposed to get a good look at, sitting in a car in front of the bank. He made an angry resolution not, under any circumstances, to glance outside of the lawyer's office. He meditated savagely that, by this resolution, the schemes of his other self in the future were abolished.

Naturally, he presently went to the window and looked to see what he was abolishing.

THERE was a car before the bank with a reddish-haired man sitting in it. A haze came out of the exhaust, showing that the motor was running. None of this impressed Sam as remarkable. But as he looked, two other men came running out of the bank. One of them carried a bag and both of them had revolvers out and they piled into the car and the reddish-haired man gunned it and it was abruptly a dwindling speck in a cloud of dust, getting out of town.

Three seconds later, old Mr. Bluford, president of the bank, came out yelling, and the cashier came after him, and it was a first-rate bank robbery they were yelling about. The men in the get-

away car had departed with thirty-five thousand dollars.

All of it had taken place so fast that Sam hardly realized what had happened when he went out to see what it was all about, and was instantly seized upon to do some work. The bankrobbers had shot out the telephone cable out of town with a shotgun, so word couldn't get ahead of them. Sam was needed to re-establish communications with the outside world.

He did, absorbedly reflecting

on the details of the robbery as he'd heard them. He was high up on a telephone pole and the sheriff and enthusiastic citizens were streaking past in cars to make his labors unnecessary, when the personal aspect of all this affair hit him.

"Migawd!" gasped Sam, shocked. "That me in the middle of next week told me to come over here and watch a bank robbery! But he didn't let on what was going to happen so's I could stop it!" He felt an incredulous in-





dignation come over him. "I would a been a hero!" he said resentfully. "Rosie would a admired me! That other me is a born crook!"

Then he realized the facts. The other him was himself, only a week and a half distant. The other him was so far sunk in dastardliness that he permitted a crime to take place, feeling no more than sardonic amusement.

And there was nothing he himself could do about it! He couldn't even tell the authorities about this depraved character! They wouldn't believe him unless he could get his other self on the telephone to admit his criminality. Even then, what could they do?

Sam felt what little zest had been left in living go trickling out of his climbers. He looked into the future and saw nothing desirable in it.

He painstakingly finished the repair of the shot-out telephone line, but then he went down to his truck and drove over to Rosie's house.

There was but one thing he could do.

ROSIE came suspiciously to the the door.

"I come to tell you good-by, Rosie," said Sam. "I just found out I'm a criminal, so I aim to go and commit my crimes far away from my home and the friends who never thought I'd turn out this way. Good-by, Rosie."

"Sam!" said Rosie. "What's happened now?"

He told her about the bank robbery and how his own self in the week after next—had known it was going to happen, and told Sam to go watch it without giving him information by which it could have been stopped.

"He knew it after it happened," said Sam bitterly, "and he could've told me about it before! He didn't, so he's a accessory to the crime. And he is me, which makes me a accessory, too. Goodby, Rosie, my own true love! You'll never see me again!"

"You set right down here," Rosie ordered firmly. "You haven't done a thing yet, so it's that other you who's a criminal. You haven't got a thing to run away for!"

"But I'm going to have! I'm doomed to be a criminal! It's that me in the week after next! There's nothing to be done!"

"Says who? I'm going to do something!"

"Like what?" asked Sam.

"I'm going to reform you," said Rosie, "before you start!"

SHE was a determined girl, that Rosie. She marched inside and put on her blue jeans, then went to her father's woodshed where he kept his tools and got a monkey wrench and stuck it in her hip pocket.

When she came to the truck, Sam said, "What's the idea, Rosie?"

"I'm riding around with you," replied Rosie, with a grim air. "You won't do anything criminal with me on hand! And if that other you starts talking to you on the telephone, I'm going to climb that pole and tell him where he gets off!"

"If anybody could keep me from turning criminal," acknowledged Sam, "it'd be you, Rosie. But that monkey wrench—what's it for?"

Rosie climbed into the seat beside him.

"You start having criminal ideas," she told him, "and you'll find out! Now you go on about your business and I and the monkey wrench will look after your morals!"

This tender exchange happened only an hour or so after the robbery and there was plenty of excitement around. But Sam went soberly about his work as telephone lineman. Rosie simply rode with him as a—well, it wasn't as a bodyguard, but a sort of M.P. escort — Morals Police. Where he worked on a line, he called the central office to report, and he heard about the hunt for the bank robbers, and told Rosie.

been in Dunnsville when the robbery happened, because his prompt repair of the phone wires had spoiled the robbers' getaway plans. They hadn't gone ten miles from Dunnsville before somebody fired a load of buckshot at them as their car roared by Lemons' Store. They were past before they realized they'd been shot at. But the buckshot had punctured the radiator, and two miles on, they were stuck.

They pushed their car off the road behind some bushes and struck out on foot, and the sheriff ran right past their car without seeing it. Then rain began to fall and the bank robbers were wet and scared and desperate. They knew there'd be roadblocks set up everywhere and they had that bag of money—part bills, but a lot of it silver—and all of Tidewater was up in arms.

Taking evasive action, they hastily stuffed their pockets with small bills—there were no big ones—but dared not take too much lest the pockets bulge. They hid the major part of their loot in a hollow tree. They separated, going to nearby towns—while rain fell heavily and covered their trails—and went to bed with chest colds. They felt miserable. But the rain washed away the scent they had left and bloodhounds couldn't do a thing.

None of this was known to Sam, of course. Rosie had taken charge of him and she kept charge. She rode with him all the afternoon of the robbery. When quitting time came, he took her home and prepared to retire from the scene.

But she said grimly, "Oh, no, you don't! You're staying right here! You're going to sleep in my brother's room, and my pa is going to put a padlock on the door so you don't go roaming off to call up that no-account other you and get in more trouble!"

"I might mess things up if I don't talk to him," Sam objected.

"He's messed things up enough by talking to you! The idea of repeating our private affairs! He hadn't ought to know them! And I'm not sure," she said ominously, "that you didn't tell him! If you did, Sam Yoder—"

Sam didn't argue that point, for there was no argument to make. He was practically meek until he discovered after supper that the schedule for the evening was a game of cribbage played in the living room where Rosie's mother and father were.

He mentioned unhappily to Rosie that they were acting like old married people without the fun of getting that way, but he said that only once. Rosie glared at him. And when bedtime came, she shooed him into her brother's room and her father padlocked him in.

He did not sleep well.

Rosie in her blue jeans with a monkey wrench in her pocket, ready to go riding with him. She did. And the next day. And the next. Nothing happened. The state banking association put up five thousand dollars reward for the bank robbers and the insurance company put up some more, but there wasn't a trace of the criminals.

There wasn't a trace of criminality about Sam, either. Rosie rode with him, but they exchanged not one single hand-squeeze, nor one melting glance, nor did they even play footsie while they were eating lunch in the truck outside a filling station. Their conduct was exemplary and it wore on Sam. Possibly it wore on Rosie, too.

One day Sam said morosely, as he chewed on a ham sandwich at lunch, "Rosie, I'm crazy about you, but this feels like I been divorced without ever even getting married first."

And Rosie snapped, "If I told you how I feel, that other you in the week after next would laugh his fool head off. So shut up!"

Things were bad, and they got no better. For nearly a week, Rosie rode everywhere with Sam in his truck. They acted in a manner which Rosie's parents would in theory have approved, but didn't even begin to believe in. They did nothing the world could not have watched without their being embarrassed, and they said very little that all the world would not have been bored to hear.

It must have been the eleventh of July when they almost snapped at each other and Rosie said bitterly, "Let me drive a while. I need to put my mind on something that it don't make me mad to think about!"

"Go ahead," Sam invited gloomily. He stopped the truck and got out the door. "I don't look for any happiness in this world any more, anyway."

He went around to the other side of the truck while she slid to the driver's seat.

"Tomorrow's going to be the twelfth," she said. "Do you realize that?"

"I hadn't given it much thought," admitted Sam, "but what's the difference?"

"That's the day where the other you was when he called you up the first time."

"That's right," said Sam morbidly. "It is."

"And so far," added Rosie, jamming her foot viciously down on the accelerator, "I've kept

you honest. If you change into a scoundrel between now and tomorrow—"

She changed to second gear. The truck jerked and bounced.

"Hey!" cried Sam. "Watch your driving!"

"Don't you tell me how to drive!"

"But if I get killed before tomorrow—"

ROSIE changed gear again, but too soon. The truck bucked, and she jammed down the accelerator again, and it almost leaped off the road.

"If you get killed before tomorrow," raged Rosie, "it'll serve
you right! I've been thinking and
thinking and thinking. And even
if I stop you from being a crook,
there'll always be that—other you
—knowing everything we say and
do." She was hitting forty miles
an hour and speeding up. "So
there'd still be no use. No hope,
anyway."

She sobbed, partly in fury and partly in grief. And the roadway curved sharply just about there and she swung the truck crazily around it—and there was a car standing only halfway off the road.

Sam grabbed for the steering wheel, but there wasn't time. The light half-truck, still accelerating, hit the parked car with the noise of dozens of empty oil-drums

falling downstairs. The truck slued around, bounced back, and then it charged forward and slammed into the parked car a second time. Then it stalled.

Somebody yelled at Sam. He got out of the truck, looking at the damage and trying to figure out how it was that neither he nor Rosie had been killed, and trying worriedly to think how he was going to explain to the telephone company that he'd let Rosie drive.

The voice yelled louder. Right at the edge of the woodland, there was a reddish-haired character screaming at him and tugging at his hip pocket. The words he used were not fit for Rosie's shell-like ears—even if they probably came near matching the way she felt. The reddish-haired man said more nasty words at the top of his voice. His hand came out of his hip pocket with something glittering in it.

Sam was swinging when the glitter began and he connected before the gun fired. There was a sort of squashy, smacking sound and the reddish-haired man lay down quietly in the road.

"Migawd!" said Sam blankly. "This was the fella in front of the bank! He's one of those robbers!"

He stared. There was a loud crashing in the brushwood. The accident had happened at the

edge of some woodland, and Sam did not need a high I.Q. to know that the friends of the red-haired man must be on the way.

A second later, he saw them. Rosie was just getting out of the car then. She was very pale and there wasn't time to tell her to get started up if possible and away from there.

One of the two running men was carrying a canvas bag with the words BANK OF DUNNS-VILLE on it.

THE men came at Sam, meanwhile expressing opinions of the state of things, of Sam, of the Cosmos—of everything but the weather—in terms even more reprehensible than the first man had used.

They saw the reddish-haired man lying on the ground. One of them—he'd come out into the road behind the truck and was running toward Sam—jerked out a pistol. He was about to use it on Sam at a range of something like six feet when there was a peculiar noise behind him. It was a sort of hollow klunk which,



even at such a time, needed to have attention paid to it. He jerked his head around to see.

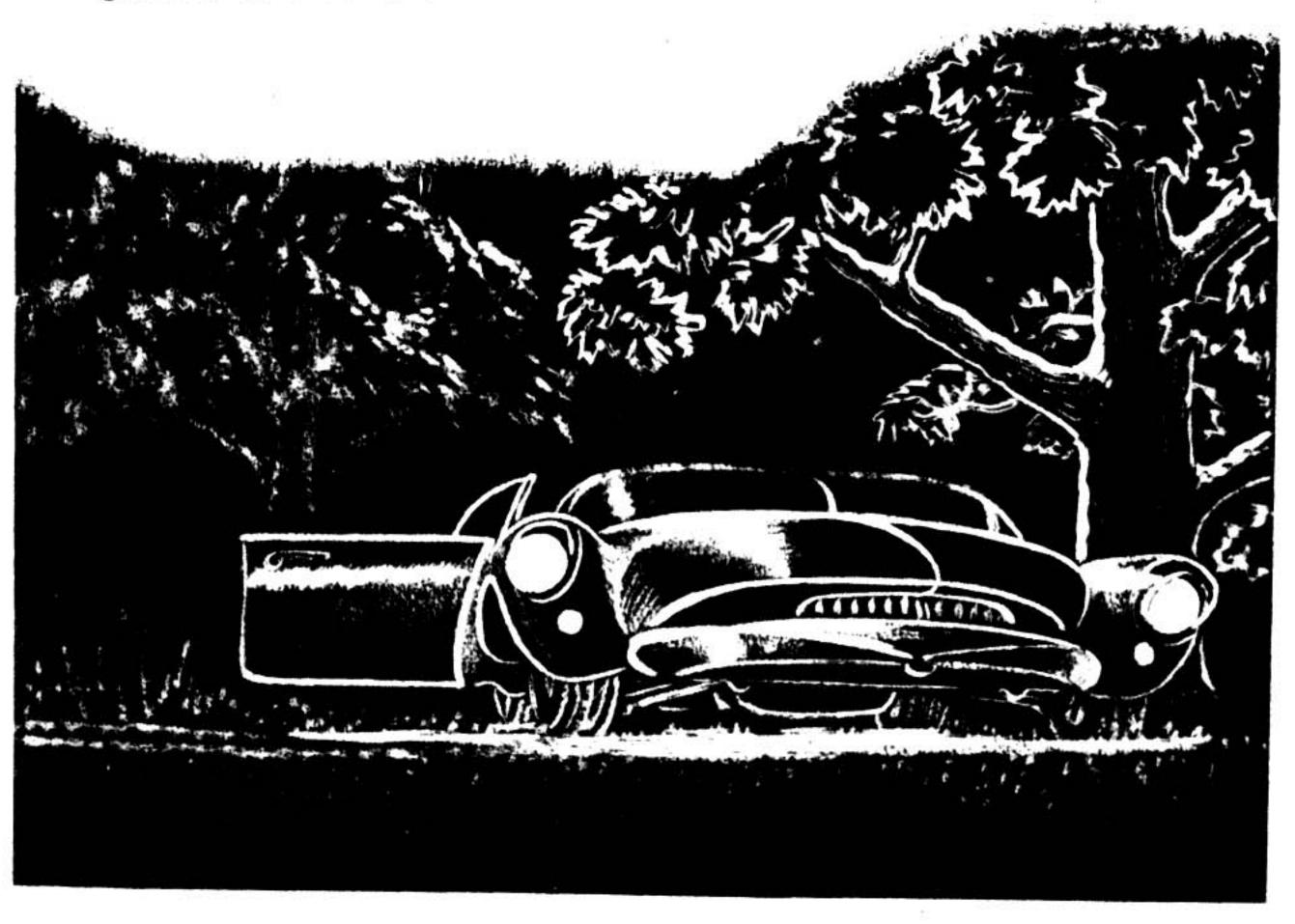
The klunk had been made by Rosie's monkey wrench, falling imperatively on the head of the second man to come out of the woods. She had carried it to use on Sam, but she used it instead on a total stranger. He fell down and lay peacefully still.

Then Sam swung a second time, at the second man to draw a pistol on him.

Then there was only the sweet singing of birds among the trees and the whirrings and other insect-noises of creatures in the grass and brushwood. Presently there were other noises, but they were made by Rosie. She wept, hanging onto Sam.

He unwound her arms from around his neck and thoughtfully went to the back of the truck and got out some phone wire and his pliers. He fastened the three strangers' hands together behind them, and then their feet, and he piled them in the back of the light truck, along with the money they had stolen.

They came to, one by one, and Sam explained severely that they



must watch their language in the presence of a lady. The three were so dazed, though, by what had befallen them that the warning wasn't really necessary.

Rosie's parents would have been pleased at how completely proper their behavior was, while they took the three bank robbers into town and turned them over to the sheriff.

That night, Rosie sat out on the porch with Sam and they discussed the particular event of the day in some detail. But Rosie was still concerned about the other Sam. So Sam decided to assert himself.

About half-past nine, he said firmly, "Well, Rosie, I guess I'd better be getting along home. I've got to try one more time to call myself up on the telephone and tell me to mind my own business."

"Says who?" demanded Rosie.
"You're staying locked up right
here tonight and I'm riding with
you tomorrow. If I kept you honest this far, I can keep it up till
sundown tomorrow! Then maybe
it'll stick!"

Sam protested, but Rosie was adamant—not only about keeping him from being a crook, but from having any fun to justify his virtue.

SHE shooed him into her brother's room and her father locked him in. And Sam did not sleep very well, because it looked as though virtue wasn't even its own reward.

He sat up, brooding. It must have been close to dawn when the obvious hit him. Then he gazed blankly at the wall and said, "Migawd! O'course!"

He grinned, all by himself, practically from head to foot. And at breakfast, he hummed contentedly as he stuffed himself with pancakes and syrup, and Rosie's depressed expression changed to a baffled alarm.

He smiled tenderly upon her when she came doggedly out to the truck, wearing her blue jeans and with the monkey wrench in her pocket. They started off the same as any other day and he told her amiably, "Rosie, the sheriff says we get five thousand dollars reward from the bankers' association, and there's more from the insurance company, and there's odd bits of change offered for those fellas for past performances. We're going to be right well off."

Rosie looked at him gloomily. There was still the matter of the other Sam in the middle of the week after next. And just then, Sam, who had been watching the telephone lines beside the road as he drove, pulled off the road and put on his climbing irons.

"What's this?" asked Rosie frightenedly. "You know—"

"You listen," said Sam, completely serene.

He climbed zestfully to the top of the pole. He hooked in the little gadget that didn't make private conversations possible on a party line, but did make it possible for a man to talk to himself ten days in the future.

Or the past.

"Hello!" said Sam, up at the top of the telephone pole. "Sam, this is you."

A voice he knew perfectly well sounded in the receiver.

"Huh? Who's that?"

"This is you," said Sam. "You, Sam Yoder. Don't you recognize your own voice? This is you, Sam Yoder, calling from the twelfth of July. Don't hang up!"

He heard Rosie gasp, all the way down there in the banged-up telephone truck. Sam had seen the self-evident, at last, and now, in the twelfth of July, he was talking to himself on the telephone. Only instead of talking to himself in the week after next, he was talking to himself in the week before last—he being, back there ten days before, working on this very same telephone line on this very same pole. And it was the same conversation, word for word.

WHEN he came down the pole, rather expansively, Rosie grabbed him and wept.

"Oh, Sam!" she sobbed. "It was you all the time!"

"Yeah," said Sam complacently. "I figured it out last night. That me back there in the second of July, he's cussing me out. And he's going to tell you about it and you're going to get all wrought up. But I can make that dumb me back yonder do what has to be done. And you and me, Rosie, have got a lot of money coming to us. I'm going to carry on through so he'll earn it for us. But I'm warning you, Rosie, he'll be back at my house waiting for me to talk to him tonight, and I've got to be home to tell him to go over to your house. I'm goin' to say 'ha-ha, ha-ha' at him."

"A-all right," said Rosie, wideeyed. "You can."

"But I remember that when I call me up tonight, back there ten days ago, I'm going to be right busy here and now. I'm going to make me mad, because I don't want to waste time talking to myself back yonder. Remember? Now what," asked Sam mildly, "would I be doing tonight that would make me not want to waste time talking to myself ten days ago? You got any ideas, Rosie?"

"Sam Yoder! I wouldn't! I never heard of such a thing!"

Sam looked at her and shook his head regretfully. "Too bad. If you won't, I guess I've got to call me up in the week after next and find out what's cooking."

"You—you shan't!" said Rosie fiercely. "I'll get even with you! But you shan't talk to that—" Then she wailed. "Darn you, Sam! Even if I do have to marry you so you'll be wanting to talk to me instead of that dumb you ten days back, you're not going to—you're not—"

Sam grinned. He kissed her. He put her in the truck and they rode off to Batesville to get married. And they did.

But you're not supposed to believe all this, and if you ask Sam Yoder about it, he's apt to say it's all a lie. He doesn't want to talk about private party lines, either. And there are other matters. For instance, Sam's getting to be a pretty prominent citizen these days. He makes a lot of money, one way and another. Nobody around home will ever bet with him on who's going to win at sports and elections, anyhow.

-MURRAY LEINSTER

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COMPETITION

By JAMES CAUSEY

They would learn what caused the murderous disease—if it was the last thing they did!

GRETA

WISH Max would treat me like a woman.

An hour ago, at dinner, John Armitage proposed a toast, especially for my benefit. He loves to play the gallant. Big man, silver mane, very blue eyes, a porcelain smile. The head of WSC, the perfect example of the politician-scientist.

"To the colony," he announced, raising his glass. "May Epsilon love them and keep them. May it only be transmittal trouble."

"Amen," Max said.

We drank. Taylor Bishop put down his glass precisely. Bishop is a gray little man with a diffident voice that belies his reputation as the best biochemist in the system. "Has Farragut hinted otherwise?" he asked mildly. Armitage frowned. "It would be scarcely prudent for Senator Farragut to alarm the populace with disaster rumors."

Bishop looked at him out of his pale eyes. "Besides, it's an election year."

The silence was suddenly ugly. Then Armitage chuckled. "All right," he said. "So the Senator wants to be a national hero. The fact still remains that Epsilon had better be habitable or Pan-Asia will scream we're hogging it. They want war anyway. Within a month—boom."

FOR a moment, I was afraid he was going to make a speech about Earth's suffocating billions, the screaming tension of the cold war, and the sacred necessity of Our Mission. If he had, I'd have gotten the weeping shrieks. Some responsibilities are too great to think about. But instead he winked at me. For the first time, I began to realize why Armitage was the Director of the Scientists World Council.

"Hypothesis, Greta," he said. "Epsilon is probably a paradise. Why should the test colony let the rest of the world in on it? They're being selfish."

I giggled. We relaxed.

After supper Armitage played chess with Bishop while I followed Max into the control room.

"Soon?" I said.

"Planetfall in eighteen hours, Doctor." He said it stiffly, busying himself at the controls. Max is a small dark man with angry eyes and the saddest mouth I've ever seen. He is also a fine pilot and magnificent bacteriologist. I wanted to slap him. I hate these professional British types that think a female biochemist is some sort of freak.

"Honestly," I said. "What do you think?"

"Disease," he said bitterly.
"For the first six months they reported on schedule, remember? A fine clean planet, no dominant life-forms, perfect for immigration; unique, one world in a billion. Abruptly they stopped sending. You figure it."

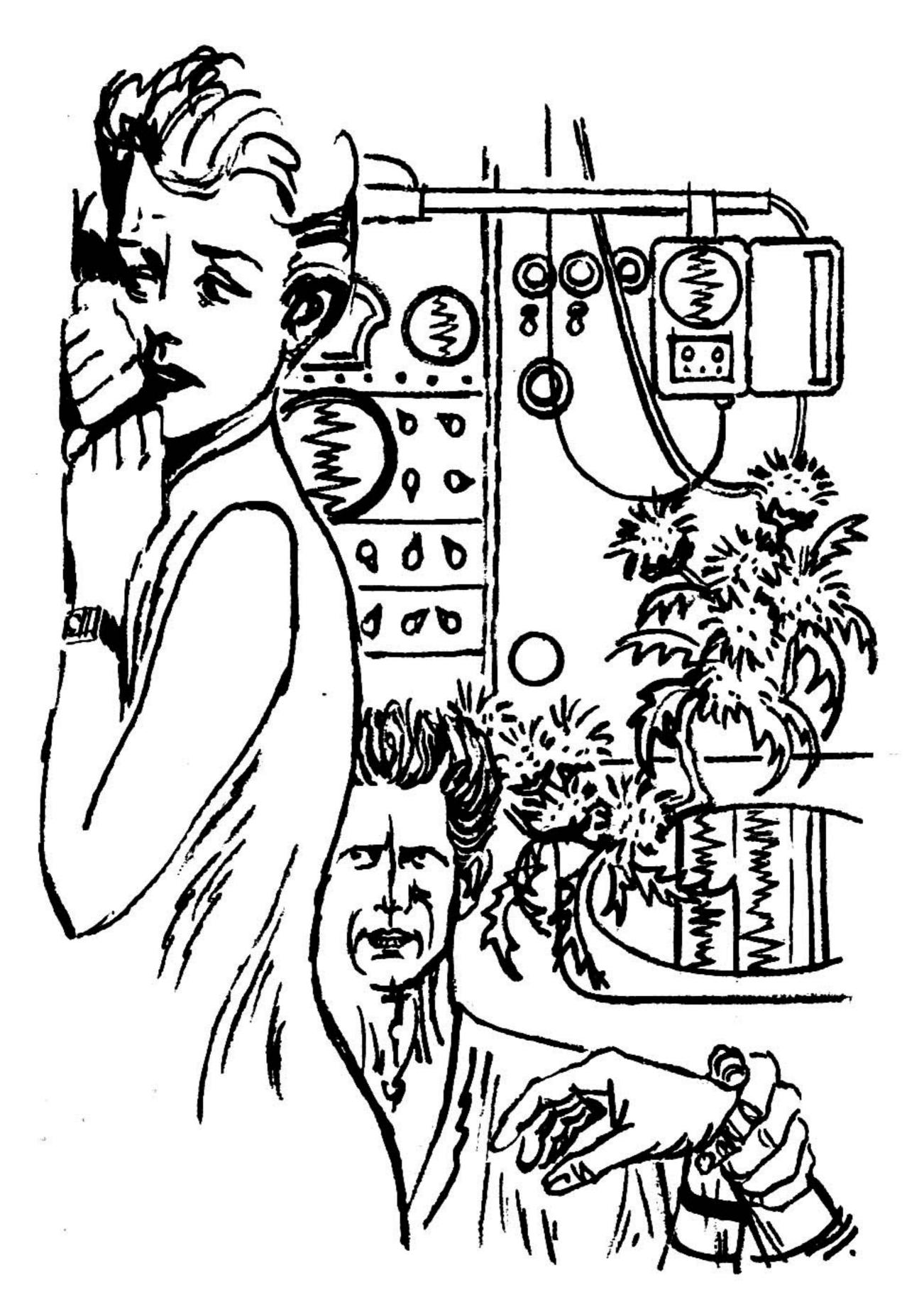
I thought about it.

"I read your thematic on Venusian viruses," he said abruptly. "Good show. You should be an asset to us, Doctor."

"Thanks!" I snapped. I was so furious that I inadvertently looked into the cabin viewplate.

Bishop had warned me. It takes years of deep-space time to enable a person to stare at the naked Universe without screaming.

It got me. The crystal thunder of the stars, that horrible hungry blackness. I remember I was sort of crying and fighting, then Max had me by the shoulders, holding me gently. He was murmuring



and stroking my hair. After a time, I stopped whimpering.

"Thanks," I whispered.

"You'd better get some sleep, Greta," he said.

I turned in.

I think I'm falling in love.

January 19

TODAY we made planetfall. It took Max a few hours to home in on the test colony ship. He finally found it, on the shore of an inland sea that gleamed like wrinkled blue satin. For a time we cruised in widening spirals, trying to detect some signs of life. There was nothing.

We finally landed. Max and Armitage donned spacesuits and went toward the colony ship. They came back in a few hours, very pale.

"They're dead." Armitage's voice cracked as he came out of the airlock. "All of them."

"Skeletons," Max said.

"How?" Bishop said.

Armitage's hands were shaking as he poured a drink. "Looks like civil war."

"But there were a hundred of them," I whispered. "They were dedicated—"

"I wonder," Bishop said thoughtfully. "White and brown and yellow. Russian and British and French and German and Chinese and Spanish. They were chosen for technical background

rather than emotional stability."

"Rot!" Armitage said like drums beating. "It's some alien bug, some toxin. We've got to isolate it, find an antibody."

He went to work.

January 22

T'M scared.

It's taken three days to finalize the atmospheric tests. Oxygen, nitrogen, helium, with trace gases. Those trace gases are stinkers. Bishop discovered a new inert gas, heavier than Xenon. He's excited. I'm currently checking stuff that looks like residual organic, and am not too happy about it. Still, this atmosphere seems pure.

Armitage is chafing.

"It's in the flora," he insisted today. "Something, perhaps, that they ate." He stood with a strained tautness, staring feverishly at the chronometer. "Senator Farragut's due to make contact soon. What'll I tell him?"

"That we're working on it," Bishop said dryly. "That the four best scientists in the Galaxy are working toward the solution."

"That's good," Armitage said seriously. "But they'll worry. You are making progress?"

I wanted to wrap a pestle around his neck.

We were all in the control room an hour later. Armitage practically stood at attention

while Farragut's voice boomed from the transmitter.

It was very emetic. The Senator said the entire hemisphere was waiting for us to announce the planet was safe for immigration. He said the stars were a challenge to Man. He spoke fearfully of the Coming World Crisis. Epsilon was Man's last chance for survival. Armitage assured him our progress was satisfactory, that within a few days we would have something tangible to report. The Senator said we were heroes.

Finally it was over. Max yawned. "Wonder how many voters start field work at once."

Armitage frowned. "It's not funny, Cizon. Not funny at all. Inasmuch as we've checked out the atmosphere, I suggest we start field work at once."

Taylor blinked. "We're still testing a few residual—"

"I happen to be nominal leader of this party." Armitage stood very tall, very determined. "Obviously the atmosphere is pure. Let's make some progress!"

February 2

THIS is progress?

For the past ten days, we've worked the clock around. Quantitative analysis, soil, water, flora, fauna, cellular, microscopic. Nothing. Max has discovered a few lethal alkaloids in some

greenish tree fungus, but I doubt if the colony were indiscriminate fungus eaters. Bishop has found a few new unicell types, but nothing dangerous. There's one tentacled thing that reminds me of a frightened rotifer. Max named it Armitagium. Armitage is pleased.

Perhaps the fate of the hundred colonists will remain one of those forever unsolved mysteries, like the fate of the Mary Celeste or the starship Prometheus.

This planet's clean.

February 4

TODAY Max and I went specimen-hunting.

It must be autumn on Epsilon. Everywhere the trees are a riot of scarlet and ocher, the scrubby bushes are shedding their leaves. Once we came upon a field of thistlelike plants with spiny seedpods that opened as we watched, the purple spores drifting afield in an eddy of tinted mist. Max said it reminded him of Scotland. He kissed me.

On the way back to the ship we saw two skeletons. Each had its fingers tightly locked about the other's throat.

February 20

WE have, to date, analyzed nine hundred types of plant life for toxin content. Bishop has tested innumerable sports and

bacteria. Our slide file is immense and still growing. Max has captured several insects. There is one tiny yellow bush-spider with a killing bite, but the species seem to be rare. Bishop has isolated a mold bacterium that could cause a high fever, but its propagation rate is far too low to enable it to last long in the bloodstream.

The most dangerous animal seems to be a two-foot-tall arthapod. They're rare and peaceable. Bishop vivisected one yesterday and found nothing alarming.

Last night I dreamed about the first expedition. I dreamed they all committed suicide because Epsilon was too good for them.

This is ridiculous!

We're working in a sort of quiet madness getting no closer to the solution.

Armitage talked to Senator Farragut yesterday and hinted darkly that the first ship's hydroponics system went haywire and that an improper carbohydrate imbalance killed the colony. Pretty thin. Farragut's getting impatient. Bishop looks haggard. Max looks grim.

February 23

OUR quantitative tests are slowing down. We play a rubber of bridge each night before retiring. Last night I trumped Max's ace and he snarled at

me. We had a fight. This morning I found a bouquet of purple spore-thistles at my cabin door. Max is sweet.

This afternoon, by mutual consent, we all knocked off work and played bridge. Bishop noticed the thistle bouquet in a vase over the chronometer. He objected.

"They're harmless," Max said. "Besides, they smell nice."

I can hardly wait for tomorrow's rubber. Our work is important, but one does need relaxation.

February 25

A RMITAGE is cheating. Yesterday he failed to score one of my overtricks. We argued bitterly about it. Taylor, of course, sided with him. Three hands later, Armitage got the bid in hearts. "One hundred and fifty honors," he announced.

"That's a lie," I said.

"It was only a hundred," he grinned. "But thank you, Greta. Now I shan't try the queen finesse."

No wonder they've won the last three evenings! Max is furious with them both.

February 28

WE played all day. Max and I kept losing. I always knew Armitage was a pompous toad, but I never realized he was slimy.

This afternoon it was game all,

and Armitage overcalled my diamond opener with three spades. Bishop took him to four and I doubled, counting on my ace-king of hearts and diamonds.

I led out my diamond ace and Armitage trumped from his hand. Bishop laid down his dummy. He had clubs and spades solid, with doubleton heart and diamonds.

"None?" Max asked Armitage dangerously.

Armitage tittered. I wanted to scratch his eyes out. He drew trump immediately and set up clubs on board, dumping the heart losers from his hand, and finally sluffing—two diamonds.

"Made seven," he said complacently, "less two for the diamond renege makes five, one overtrick doubled. We were vulnerable, so it's game and rubber."

I gasped. "You reneged deliberately!"

"Certainly. Doubleton in hearts and diamonds in my hand. If you get in, I'm down one. As it was, I made an overtrick. The only penalty for a renege is two tricks. The rule book does not differentiate between deliberate and accidental reneges. Sorry."

I stared at his florid throat, at his jugular. I could feel my mouth twitching.

On the next hand I was dummy. I excused myself and went into the lab. I found a scalpel. I came up quietly behind Armitage and Bishop saw what I was going to do and shouted and I was not nearly fast enough. Armitage ducked and Bishop tackled me.

"Thanks, dear," Max said thoughtfully, looking at the cards scattered on the floor. "We would have been set one trick. Club finesse fails."

"She's crazy!" Armitage's mouth worked. "The strain's too much for her!"

I cried. I apologized hysterically. After a while, I convinced them I was all right. Max gave me a sedative. We did not play any more bridge. Over supper I kept staring at Armitage's throat.

After eating, I went for a long walk. When I got back to the ship, everyone was sleeping.

March 1

BISHOP found Armitage this morning, in his cabin. He came out, very pale, staring at me.

"You bitch," he said. "Ear to ear. Now what'll I do for a part-ner?"

"You can't prove it," I said.

"We'll have to confine her to quarters," Max said wearily. "I'll tell Farragut."

"And let him know the expedition is failing?"

Max sighed. "You're right. We'll tell them Armitage had an accident."

I said seriously, "It was obviously suicide. His mind snapped."

"Oh, God," Max said.

They buried Armitage this afternoon. From my cabin, I watched them dig the grave.

Cheaters never prosper.

March 2

ragut this morning. He said Armitage had died a hero's death. Farragut sounds worried. The Pan-Asians have withdrawn their embassy from Imperial Africa. Tension is mounting on the home front. Immigration must start this week. Max was very reassuring. "Just a few final tests, Senator. We want to make sure."

We puttered in our laboratories all afternoon. Bishop seemed bored. After dinner he suggested three-handed bridge and Max said he knew a better game, a friendly game his grandmother had taught him—hearts.

March 5

TT'S a plot!

All day long Bishop and Max have managed to give me the queen of spades. It's deliberate, of course. Three times I've tried for the moon and Bishop has held out one damned little heart at the end. Once Max was slightly ahead on points and Bishop demanded to see the score. I

thought for a moment they would come to blows, but Bishop apologized.

"It's just that I hate to lose," he said.

"Quite," Max said.

When we finally turned in, Bishop was ahead on points.

Too far ahead.

March 6

It has a peculiar horselike stridency that makes me want to tear out his throat. Twice today I've broken down and cried when he made a jackpot.

I'm not going to cry any more. Supper was the usual, beef-yeast and vita-ale. I remember setting Bishop's plate in front of him, and the way his pale eyes gleamed between mouthfuls. "Three thousand points ahead," he gloated. "You'll never catch me now. Never, never!"

That was when he gripped his throat and began writhing on the floor.

Max felt his pulse. He stared at me.

"Very nice," he said. "Quick. Did you use a derivative of that green fungus?"

I said nothing. Max's nostrils were white and pinched. "Must I make an autopsy?"

"Why bother?" I said. "It's obviously heart failure."

"Yes, why bother?" he said.

He looked tired. "Stay in your cabin, Greta. I'll bring your meals."

"I don't trust you."

His laughter had a touch of madness.

March 10

MAX unlocked my cabin door this morning. He looked drawn. "Listen," he said. "I've checked my respiration, pulse, saliva, temperature. All normal." "So?"

"Come here," he said. I followed him into the lab. He indicated a microscope. His eyes were bright.

"Well?"

"A drop of my blood," he said. "Look."

I squinted into the microscope. I saw purple discs. Oddly, they did not attack the red blood cells. There was no fission, no mitosis. The leucocytes, strangely enough, let them alone.

My hands were shaking as I took a sterile slide and pricked my finger. I put the slide under the microscope. I adjusted the lens and stared.

Purple discs, swimming in my bloodstream. Thriving. Minding their own business.

"Me, too," I said.

"They're inert," Max said hoarsely. "They don't affect metabolism, cause fever, or interfere with the body chemistry in any way. Do they remind you of anything?"

I thought about it. Then I went to the slide file that was marked flora—negative.

"Right," Max said. "The purple thistle. Spores! The atmosphere is clogged with them. Greta, my sweet, we're infected."

"I feel fine," I said.

All day long we ran tests. Negative tests. We seem to be disgustingly healthy. "Symbiosis," Max said finally. "Live and let live. Apparently we're hosts."

Only one thing disturbs me.

Most symbiotes do something for their host. Something to enhance the host's survival potential.

We played chess this evening. I won. Max is furious. He's such a poor sport.

March 11

MAX talked with Senator Farragut this morning. He gave Epsilon a clean bill of health and the Senator thanked God. "The first starship will leave tonight," the Senator said. "Right on schedule, with ten thousand colonists aboard. You're world heroes!"

Max and I played chess the rest of the day. Max won consistently. He utilizes a fianchetto that is utterly impregnable. If he wins tomorrow, I shall have to kill him.

MAX

March 13

IT was, of course, necessary for me to destroy Armitage and Bishop. They won far too often. But I am sorry about Greta. Yet I had to strangle her.

If she hadn't started that infernal queen's pawn opening it would have been different. She beat me six times running, and on the last game I pulled a superb orang-outang, but it was too late. She saw mate in four and gave me that serpent smirk I know so well.

How could I have ever been in love with her?

March 14

FRIGHTFULLY boring to be alone. I have a thought. Chess. Right hand against left. White and black. Jolly good.

March 16

HAVEN'T much time.

Left was black this morning and I beat him, four out of five. We're in the lab now. He's watching me scribble this. His thumb and forefinger are twitching in fury. He looks like some great white spider about to spring.

He sees the scalpel, by the microscope. Now his fingers are inching toward it. Treacherous beast. I'm stronger. If he tries to amputate . . .

—JAMES CAUSEY

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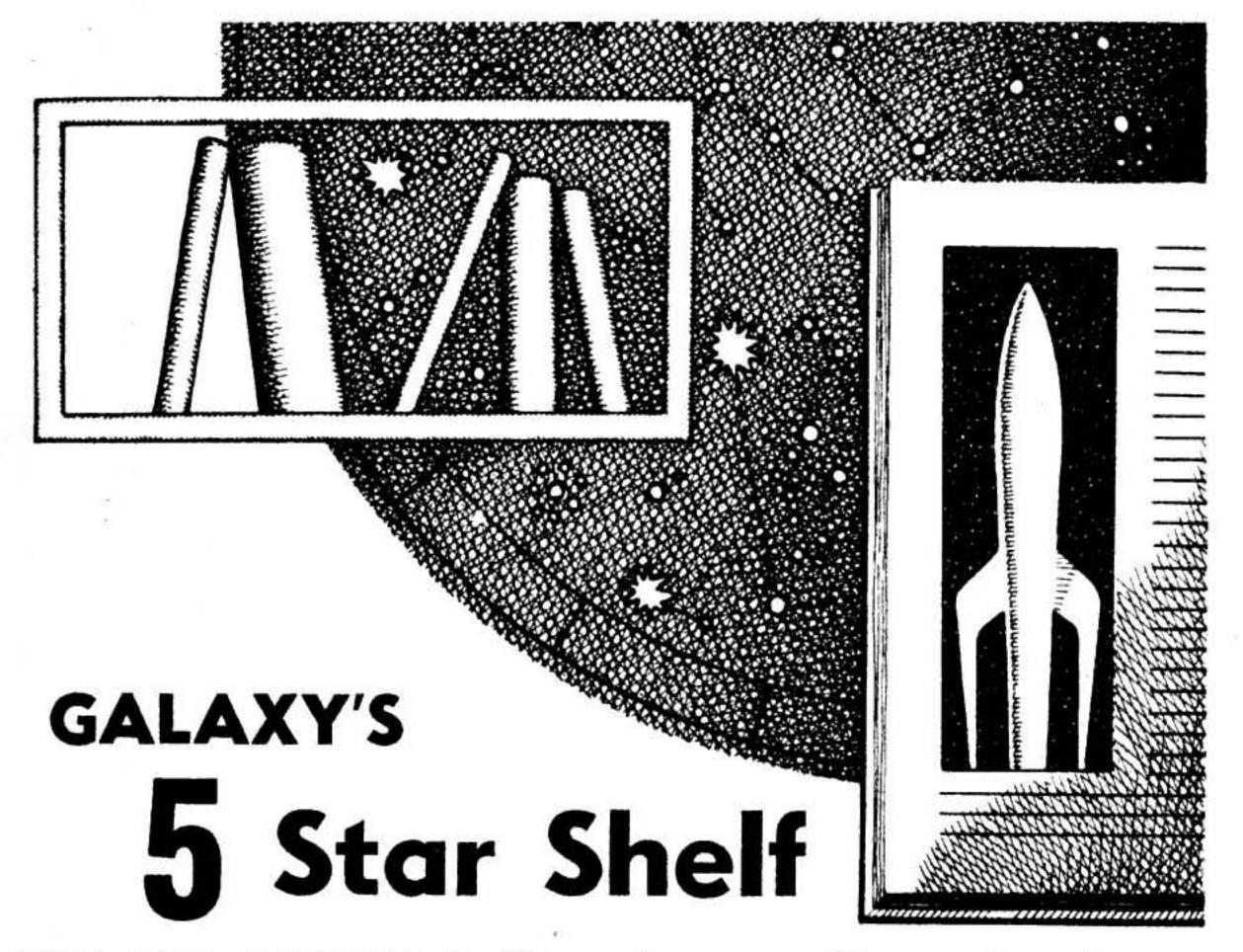
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THE MAD READER by Har- from a million copies—deserves vey Kurtzman, Jack Davis, Bill latine Books, 35c

F you don't already know about the comic book to end all comic books, this volume will serve as a splendid introduction. If you do (remember its bloody takeoff on "Superman" called "Superduperman," for example?), buy lots of copies to give your friends.

Why? Well, this best of all satires on the comics—itself a regular monthly comic that has a national circulation not far

a narrower audience (i.e., intel-Elder and Wallace Wood. Bal- lectuals and such) and maybe it will get it now that it has been beautifully Ballantined.

> THE TREASURY OF SCI-ENCE FICTION CLASSICS, edited by Harold W. Kuebler, Hanover House, \$2.95

> INTRODUCING the second ■ Big Bargain Buy of 1954. The first is Sloane's Stories for Tomorrow, 640 pages. This has 704. It contains famous old-timers by Poe, Wells (two), Conan Doyle (The Maracot Deep complete),

Verne (Round The Moon complete), E. M. Forster, Capek (R. U. R.) F. Scott Fitzgerald, Garrett P. Serviss (only bad story in the book), S. Fowler Wright, Ambrose Bierce and J. P. Priestley, and excerpts from novels by Stapledon, Aldous Huxley, and Balmer and Wylie.

It's a generally distinguished collection of fine old chestnuts for the science fiction novice—and for us addicts as well, if we don't already have most of them in other books.

ATOMS IN THE FAMILY by Laura Fermi. University of Chicago Press, \$4.00

TO be thoroughly enchanted (for a change) by an "inside story" of the atom bomb, read this book. It's a housewife's narrative of what it was like to live with one of the prime pioneers of atomic energy, and a charming and revealing job it is.

Did you know, for example, that Fermi and some associates actually patented a process for slowing neutrons so they could penetrate uranium atoms as early as 1934? Laura Fermi tells you this and much, much else in this wifely tribute to a great scientist and human being.

Though published before Fermi died, it remains a fit memorial to him: continuously enthralling

from its description of rugged childhood through his invention of "Fermi's Streetcar" on the incredible giant cyclotron now in operation at the University of Chicago. An unforgettable book.

CELESTIAL SPACE, INC., by Charles Coombs. Westminster Press, \$2.75

EVEN though not really a science fiction juvenile, this item deserves a big boost. Coombs imagines his young hero, Eddie Winston, obtaining a "legal" monopoly on 100 light-years of space around Earth, from a small-town judge who went along for the laughs. What follows when the press gets hold of the story is uproarious chaos.

Eddie claims rights to every sort of space, from that used to make the hollow tubes in macaroni to the air that is so cruelly tortured when a jet plane tears through it. And the payoff—young Eddie has a serious motive behind his fantastic idea, after all—is in itself a wonderful example of American ingenuity.

STAR SCIENCE FICTION NO. 3, edited by Frederik Pohl. Ballantine Books, 35c

THE third Pohl annual of never-before-published stories is up to the usual standard—

Asimov, Bradbury, Clarke (a nice bit on undersea cattle ranching!), Philip Dick, Gerald Kersh and Chad Oliver. Almost as good are stories by del Rey, Matheson, Vance and Williamson.

THE COMPLETE BOOK OF HELICOPTERS by D. N. Ahn-strom. World Publishing Co., \$4.95

View of the history and current status of the "whirlybirds." I found it and its rich supply of illustrations completely engrossing.

It's science fiction in the process of coming true.

THE FELLOWSHIP OF THE RING by J. R. R. Tolkien. Houghton Mifflin Co., \$5.00 . . . THE BROKEN SWORD by Poul Anderson. Abelard-Schuman, \$2.75

TWO twigs of witching more or less off the same branch, for those who still have a liking for elves, trolls, goblins.

Mr. Tolkien's tale of Hobbits—an invented faerie troupe—is rich, flavorsome, exhaustively detailed and almost too leisurely; Mr. Anderson's opus is a ripsnorting, bloody, imitation-Norse epic containing all the elements

of faerie from the Chen of China to the Scottish Sidhe, but with emphasis on a war to the death between the Elves and the Trolls. To put it bluntly, I read about half of each of these excellent books and had to give 'em up. They're meat for the rune-lovers, but as for me, I'll take such science fiction as—

EARTHMAN, COME HOME by James Blish, G. P. Putnam's Sons, \$3.50

Okies, tramp cities torn from Earth's surface, wandering through the Galaxy powered by anti-gravity devices known as spindizzies. The cities are the hobo camps of tomorrow, doing the Universe's hard work for pay in germanium, etc.

The book took me back to the days of Asimov's Foundation series and Jack Vance's wonderful "Magnus Ridolph" tales. Blish has written a real, honest, pure, gee-whiz space opera—and you'll love it.

FIND THE CONSTELLA-TIONS by A. E. Rey. Houghton Mifflin Co., \$3.00

REMEMBER Rey's The Stars, A New Way to See Them? Here the idea behind that unique book has been delightfully scaled down to the child's level, with entirely new sketches and maps of the constellations, together with a subtly simplified but not too written-down text. It's perfect for arousing any young person's curiosity about the heavens above him—and it'll also teach parents a lot they should know!

THE BEST FROM FANTASY AND SCIENCE FICTION, FOURTH SERIES, edited by Anthony Boucher. Doubleday and Co., \$3.50

Likeable, as usual. B-plus or better tales by Bester, Kornbluth (dandy!), Porges, Sheckley, McComas, Avram Davidson (enchanting!), Albert Compton Friborg (hot stuff!), Shirley Jackson, Daniel Galouye, Manly Wade Wellman (an exquisite job) and Asimov's wonderful science fiction parody of W. S. Gilbert's "The Aesthete."

Plus five other items I thought minor or just not good, but eleven to five is a good average—and you, of course, may like the other five, too. Warm, neighborly congratulations to M. Boucher.

APPARITIONS by G. N. M. Tyrrell. Pantheon Books, \$3.00

Sponsored by the British Society for Physical Research, the book purports to present evidence for the existence of ghosts, clair-voyance and similar parapsychological matters. Most of the evidence dates from the Victorian era, but even so, one's skepticism is shaken by the authority and honesty of the researchers and by the apparent reality of some (not all) the cases.

No matter what you may think of psychical research in general, I'll guarantee you a fascinating bit of reading here—far more persuasive than the dismally unscientific work of Doctor Joseph B. Rhine.

put out Conan The Barbarian (3.00) for Conan-lovers; fifth in the series . . . And Gnome has also published Northwest of Earth by C. L. Moore (\$3.00) for lovers of those characters, Northwest Smith and the beauteous Jirel of Joiry . . . Pocket Books has reprinted Philip Van Doren Stern's The Moonlight Traveler under the title Great Tales of Fantasy and Imagination (35c). Nice stuff.

-GROFF CONKLIN



FOR YOU ONLY

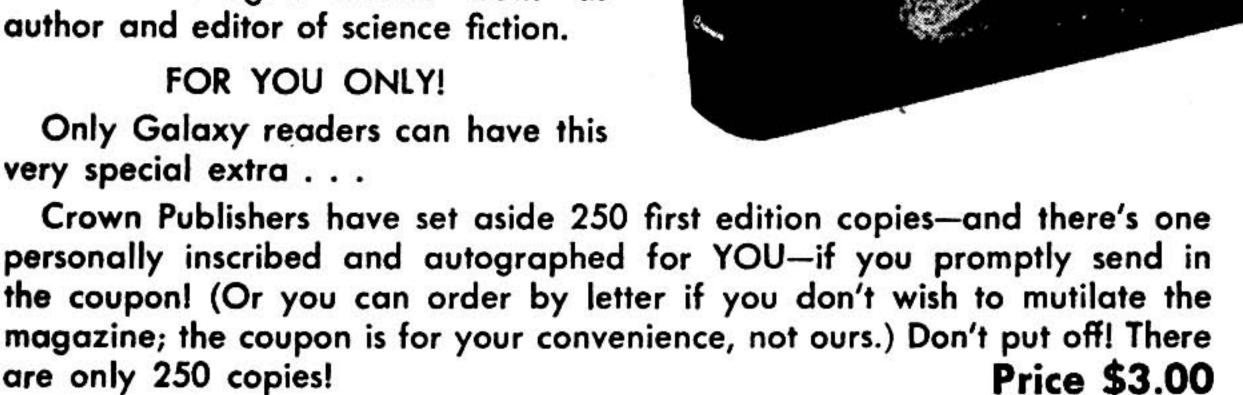
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A Woman's Place

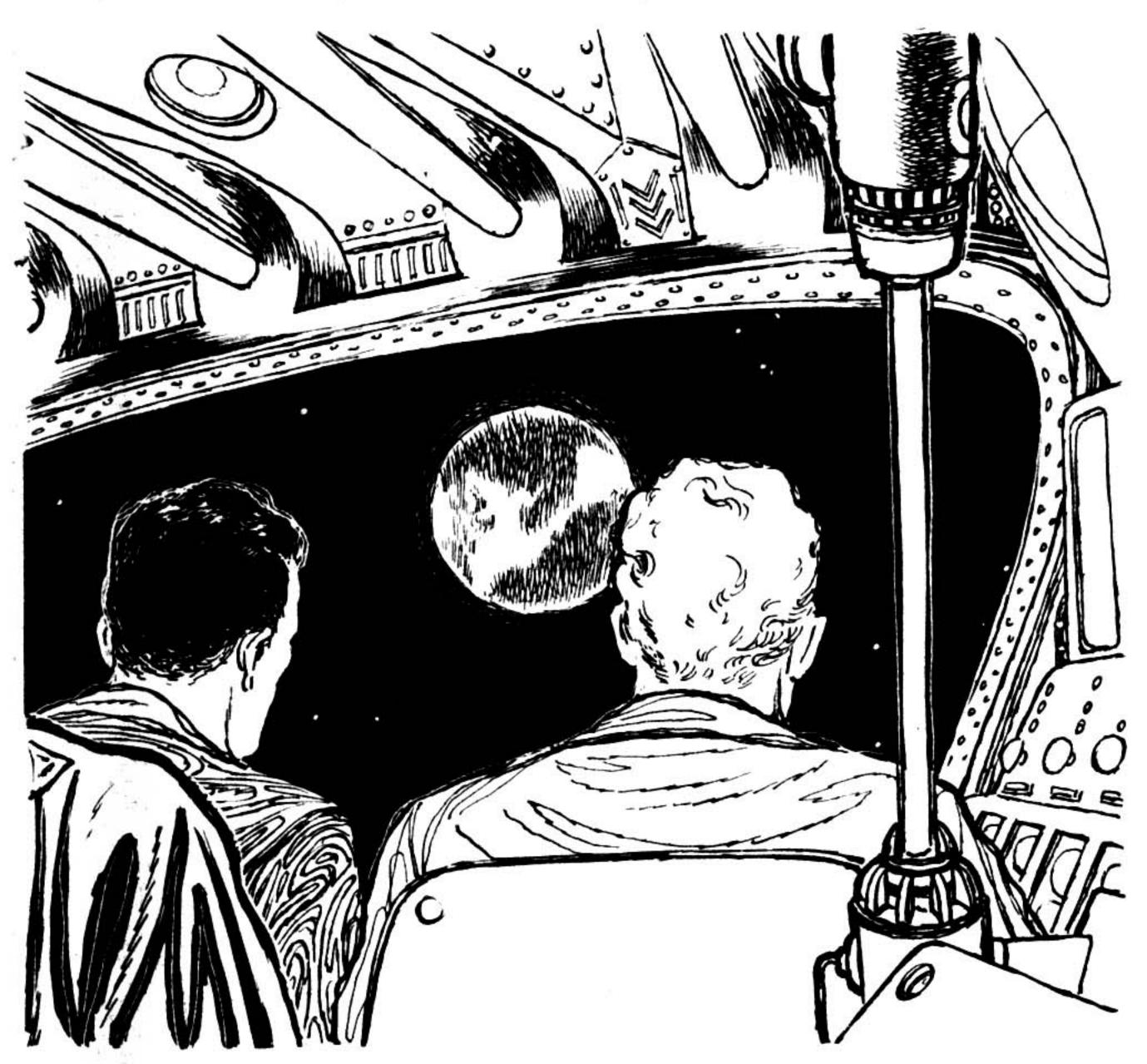
By MARK CLIFTON



Kitty's name which half roused her from sleep. She eased her angular body into a more comfortable position in the sack. Still more asleep than

awake, her mind reflected tartly that in this lifeboat, hurtling away from their wrecked spaceship back to Earth, the sleeping accommodation was quite appropriately named. On another men-

Home is where you hang up your spaceship that is, if you have any Miss Kitty along! Illustrated by EMSH



tal level, she tried to hear more of what was being said about her. Naturally, hearing one's name spoken, one would.

"We're going to have to tell Miss Kitty as soon as she wakes up." It was Sam Eade talking to Lt. Harper—the two men who had escaped with her.

"Yes, Sam," the lieutenant answered. "What we've suspected all along is pretty definite now."

Still drowsing, she wondered, without any real interest, what they felt they must tell her. But the other level of her mind was more real. She wondered how she looked to these two young men while she slept. Did she sleep with her mouth open? Did her tiara slip while she snored?

VIVIDLY, as in full dreaming, she slipped back into the remembered scene which had given birth to the phrase. At some social gathering she had been about to enter a room. She'd overheard her name spoken then, too.

"Miss Kitty is probably a cute e n o u g h name when you're young," the catty woman was saying. "But at her age!"

"Well, I suppose you might say she's kept it for professional reasons," the other woman had answered with a false tolerance. "A school teacher, wanting to be cozy with her kiddies, just a big sister." The tolerance was too thin, it broke away. "Kind of pathetic, I think. She's so plain, so very typical of an old maid school teacher. She's just the kind to keep a name like Miss Kitty."

"What gets me," the first one scoffed, "is her pride in having such a brilliant mind—if she really does have one. All those academic degrees. She wears them on every occasion, like a tiara!"

She had drawn back from the door. But in her instant and habitual introspection, she realized she was less offended than perversely pleased because, obviously, they were jealous of her intellectual accomplishments, her ability to meet men on their own ground, intellectually as good a man as any man.

The half dream drowsiness was sharply washed away by the belated impact of Sam Eade's question to Lt. Harper. Reality flashed on, and she was suddenly wide awake in the lifeboat heading back to Earth.

"What is it you must tell me?"
She spoke loudly and crisply to
the men's broad backs where
they sat in front of the instrument panel. The implication of
the question, itself, that they had
been holding something back...

Lt. Harper turned slowly around in his seat and looked at her with that detested expression of amused tolerance which his kind of adult male affected toward females. He was the dark, ruggedly handsome type, the kind who took it for granted that women should fawn over him. The kind who would speak the fatuous cliche that a woman's place was in the home, not gallivanting off to teach colonists' children on the fourth planet of Procyon. Still, perhaps she was unjust, she hardly knew the man.

"Oh, you awake, Miss Kitty?" he asked easily. His tone, as always, was diffident, respectful toward her. Odd, she resented that respect from him, when she would have resented lack of it even more.

"Certainly," she snapped.
"What is it you must tell me?"
"When you're dressed, freshened up a bit," he answered, not evasively, but as if it could wait.

CHE started to insist, but he had already turned back to the nose window to study the starry sky and the huge misty green ball of Earth in front of them. Sam Eade, the radioman, was intently twisting the dials on his set with a puckered frown between his blond eyebrows. He was an entirely different type, tall, blond, but just as fatuously masculine, as arrogantly handsome. Probably neither one of them had an ounce of brainshandsome people so seldom needed to develop mental ability.

Sam, too, turned his face farther away from her. Both backs told her plainly that she could dress, take care of her needs, with as much privacy as the lifeboat could allow anybody.

Not that it would take her long. She'd worn coveralls since the catastrophe, saving the dress she'd had on for landing on Earth. They'd had to leave most

of her luggage behind. The lieutenant had insisted on taking up most of the spare space in the lifeboat with that dismantled space warper from the wreck of their ship.

She combed her short graying hair back of her ears, and used a little water sparingly to brush her teeth. Perhaps it had been a quixotic thing, her giving up a secure teaching post on Earth to go out to Procyon IV. Except that she'd dreamed about a new colony where the rising generation, under her influence, would value intellect—with the girls no different from the boys. Perhaps it had been even sillier to take a cabin on a freighter, the only passenger with a crew of four men. But men did not intimidate her, and on a regular passenger ship she'd have been bored stiff by having to associate with the women.

Two of the men . . .

It wasn't quite clear to her, even yet, what had happened. They'd used the normal drive to get clear of regular solar shipping lanes. The warning bell had rung that they were about to warp into hyperspace, a mechanism which canceled out distance and made the trip in apparent time no more than an overnight jaunt to Mars. There was a grinding shudder—then a twisted ship which looked as if some giant had taken

a wet rag and torqued it to squeeze out the water. Lt. Harper and Sam had got her out of her cabin, and finally into the lifeboat which was only partly crippled.

The other two men of the crew . . .

She zipped up the front of her coveralls with a crisp gesture, as if to snap off the vision. She would show no weakness in front of these two men. She had no weakness to show!

"All right, gentlemen," she said incisively to their backs. "Now. What is it I must be told?"

Lastern halves of North and South America clearly. The Mestern portions were still in dim darkness.

"See anything wrong, Miss Kitty?" the lieutenant asked quietly.

She looked more closely, sensing a possible trap in his question, a revealment of her lack of knowledge.

"I'm not an authority on celestial geography," she said cautiously, academically. "But obviously the maps I've seen were not accurate in showing the true continental proportions." She pointed to a small chart hanging on the side wall. "This map shows Florida, for example, a much longer peninsula than it actually is. A number of things like that. I don't see anything else wrong, but, of course, it's not my field of knowledge."

Lt. Harper looked at her approvingly, the kind of look she gave a bright pupil who'd been especially discerning.

"Only it's not the map that's wrong, Miss Kitty," he said. "It is my field of knowledge, and I've seen those continental outlines hundreds of times. They always corresponded to the map... before."

She looked at him without comprehension.

"Not only that," Sam Eade entered the conversation. "As soon as we were clear of the wreck. Lt. Harper took a fix on stars and constellations. He's an astrogator. He knows his business. And they were wrong, too. Just a little wrong, here and there, but enough. And even more than that. On a tight beam, I should have been able to make a connection with Earth headquarters on this set. And I haven't yet got communication, and we know there's nothing wrong with this set."

"Sam knows his business, too, Miss Kitty," Lt. Harper said. "If he can't get communication, it's because there isn't any."

She looked wide-eyed from one to the other. For once, she was more concerned with a problem than with concealing her ignorance about it.

"It means," the lieutenant said, as if he were answering a question she hadn't yet asked, "that the Earth we are returning to is not the Earth we left."

"I don't understand," she gasped.

"There's a theory," Lt. Harper answered slowly. "Heretofore it has been considered only a mathematical abstraction, and having no counterpart in reality. The theory of multiple dimensions." She looked at him closely, and in her habitual ambivalence of thought reflected that he sounded much more intelligent than she had suspected.

"I've read about that," she answered.

He looked relieved, and threw a quick look at Sam. Apparently he had underestimated her intelligence, too—in spite of all her degrees.

"WE never thought it could be real," he emphasized. "But the theory was that multiple universes lay side by side, perhaps each an instant's time away from the other. The only thing I can see is that some flaw in the space

warper threw us out of our dimension into another one closely adjacent—not far enough for things to be totally different, just different enough that the duplication isn't identical. It's Earth, but it's not our Earth. It's a New Earth, one we don't know anything about."

"In another few hours, we'll be entering the atmosphere," Sam put in, "and we don't know what we'll find. We thought you ought to know."

She flared in exasperation at the simple assumption of male arrogance.

"Of course I should know!" she snapped back. "I am not one of your little bits of blonde, emptyheaded fluff to be protected by strong males! I should have been told immediately!"

Lt. Harper looked at Sam with a broad grin. It was amusement, but it was more—a confirmation that they could depend on her to take it in her stride—an approval. Apparently, they had discussed more things about her than she'd overheard, while she slept. He didn't turn off the grin when he looked directly at her.

"What could you have done about it, if we had told you, Miss Kitty?" he asked mildly.

IT was not the same Earth. The charts and maps had not been wrong. Her tentative theory that

perhaps there were vision flaws in the plastic nose window had not stood up.

The continents, the lakes, the rivers — the topography really was distorted. Now there was the Mississippi River, one spot swinging rather too widely to the East. The Great Lakes were one huge inland sea. The Gulf of Mexico swung high up into what had once been Alabama and Georgia.

There was no New Orleans, shipping center of the world, headquarters of Space.

There were no cities anywhere up and down the Mississippi. Where St. Louis should have been, there was virgin forest. As they dropped down into the upper reaches of atmosphere, experiencing the familiar and sometimes nauseating reference shift from ahead to below, there had been no New York to the East, no San Francisco to the West. There had been no Boulder Dam, no Tennessee Valley project, no conhydroelectric installatinuous tions running the entire length of the Mississippi, where the strength of the Father of the Waters had finally been harnessed for Man. There were no thin lines of highways, no paint-brush strokes of smoke against the canvas of the Gulf of Mexico to denote steamers, for atomic power was still not available to all.

On this New Earth, Man could

not yet have reached a state of complex technology.

And as they dropped lower still, through their telescope sights, they saw no canoes on the river or the feeder streams. They saw no huts along the river shore, no thin streamers of wood smoke from huts hidden under the trees along the bayous. New Earth was purple and blue, then shading into green as they dropped lower. They sighted a deer drinking at the edge of a pool.

But there was no trace of Man. "If there are no scars, no defacements upon this forest primeval," Miss Kitty said didactically, "then Man has not evolved on New Earth." Since it was spoken in the tone of an axiom, and there was no evidence to refute it, neither of the two men felt like arguing the matter.

THEY were low enough now that they were flying horizontally rather than dropping vertically. They were still searching for traces of some kind of artifacts. They were also searching, Lt. Harper advised them at last, for a suitable place to land. They wanted a higher ground than the delta country so they might be free of insect pests, assuming there were some since deer could be seen throwing their heads back along their sides as if to chase away flies. They wanted higher

ground with a stream of water going over falls to supplement their limited power in the life-ship. On the chance there were fish, it would be nice to be handy to a lake. A forest for game. A level ground for a permanent camp.

Since they were here, and it might be some time before they could figure out a way to return to Old Earth, they may as well make the best of it.

They found the kind of place they wanted, a little to the west of the Mississippi. They grounded the lifeship at the edge of a natural clearing beside a lake where a stream of sparkling water dropped from a rock ledge.

They settled the ship on the springy turf, then sat and looked at one another as if they were suddenly all strangers. Wordlessly, Lt. Harper got up and opened the door of the lifeship. He threw down the hinged metal steps. He stood back. Miss Kitty went through the door first and down the steps. The two men followed.

They stood on the ground of New Earth, and looked at one another the way they had in the ship. In the minds of each there was the thought that some kind of a ceremonial speech should be made, but no one volunteered it.

"I suppose we should have a campfire," Miss Kitty said doubt-fully.

They did not realize it at the time, but it was the most effective speech which could have been devised. It was a symbol. Man had discovered and taken possession of New Earth. His instinctive thought was to place his brand upon it, an artificial fire.

All of them missed the significance of the fact that it was Miss Kitty who had made the first move in the domestication of this New Earth.

Miss Kitty began to be dimly aware of the significance. At first they had lived a sort of Robinson Crusoe kind of life, leaning pretty heavily upon the stores of the liferaft.

It had been she who had converted it over into more of the Swiss Family Robinson pattern of making use of the resources about them.

The resources were abundant, bountiful. Yet the two men seemed little interested, and appeared content to live off the stores within the liferaft. They devoted almost all their time, except that little for bringing up firewood and trapping game, to fiddling with that gadget they called a warp motor. They were trying to hook it up to the radio sets, they said.

Miss Kitty detested women who nagged at men, but she felt

compelled to point out that this was the fall season upon New Earth, and winter would soon be upon them. It should not be a severe winter at this latitude, but they must be prepared for it with something more substantial than her uncomfortable sleeping place in the liferaft; nor would the two of them continue to enjoy sleeping out under the trees, if a blanket of snow fell some night.

"I was hoping we could be back home before winter sets in, Miss Kitty," Lt. Harper apologized mildly.

She had not nagged them. She had simply shut her lips and walked away.

The next day they began cutting logs.

It was odd, the basic pleasure she felt in seeing the sides of the cabin start to take form. Certainly she was not domestic by nature. And this could, in no sense, be considered a home. Still, she felt it might have gone up faster, if the men had used their muscles—their brute strength—rather than spend so much futile time trying to devise power tools.

They were also inclined to talk too much about warping radio wave bands through cross sections of sinowaves, and to drop their work on the cabin in favor of spending long hours trying new hookups.

But Miss Kitty never nagged

about it. She had even tried to follow some of the theory, to share in their efforts to put such theory into practice, to be just a third fellow. Instead she found her thoughts wandering to how an oven could be constructed so she could bake and roast meats instead of broiling and frying them over an open fire.

Game was plentiful, fish seemed to be begging for the hook. Every day, without going too far away from camp, she found new foods; watercress, mustard greens, wild turnips, wild onions, occasionally a turkey nest with eggs still edible, hollow trees where wild bees had stored honey, persimmons still astringent, but promising incredibly sweet and delicious flavor when frost struck them, chinquapin, a kind of chestnut, black walnuts. There was no end to what the country provided. Yet the men, instead of laying in winter stores, spent their time with the warp motor.

Kitty interrupted an explanation of Lt. Harper's on how they were calibrating the torquing degrees. She told him that he and Sam simply must help her harvest a hillside patch of wild maise she had found, before the rains came and ruined all the grain with mold, or the migrating birds ate it all.

The cabin they were erecting would contain only two rooms—a large general room for cooking, eating, visiting, such as an old-fashioned farm kitchen had once been. A little room, opening off it, would be her sleeping room. She raised her eyebrows questioningly, and Sam explained they would build a small, separate bunkhouse for himself and Lt. Harper.

She had a curious sense of displeasure at the arrangement. She knew she should be pleased at their understanding of the need for privacy. There was no point in becoming primitive savages. She should be grateful that they shared her determination to preserve the civilized codes. She told herself, rather severely, that the preservation of civilized mores was extremely important. And she brought herself up short with a shocking question, equal to a slap in the face.

Why?

She realized then she had intuitively known from the first that they would never get back to Old Earth. Her instincts had been functioning, insuring their lives, where intellect had failed them completely. She tried to laugh scornfully at herself, in feminist tradition. I magine! Katheryn Kittredge, Career Woman, devoted to the intellectual advancement of Man, thinking

that mere cooking and cleaning and mending was the supremely important thing.

But she failed in her efforts to deride herself. The intellectual discussions among the small groups of intelligent girls back on Old Earth were far away and meaningless. She discovered she was a little proud and strangely contented that she could prepare edible food. Certainly the two men were not talented; and someone had to accept the responsibility for a halfway decent domestic standard and comfort.

As, for example, with the walls of the cabin halfway up, it was necessary to point out that while they may be going to put the little cookstove—welded together out of metal scrap—in the cabin, there was no provision for a fireplace. How would they keep warm through the long winter months this year, and in the years to come?

Lt. Harper had started to say something. Then he shrugged and a hopeless look came over his face.

"Perhaps you are right, Miss Kitty," he said humbly. "It may be spring, at that, before we can finish trying the more obvious combinations. We're trying to..." He broke off, turned away, and began to mark off the spot where they would saw down through the logs to fit in a fireplace.



LATER that day, she overheard him tell Sam that, theoretically at least, there could be millions of versions of the Earth, each removed an infinitesimal point from the next. There was the chance the flaw in the torque motor, which still eluded him, might not automatically take them back to the right cross-section, even if he found it. They might have to make an incredible number of trials, and then again they might hit it on the very next combination.

"And you might not!" she cut into the conversation, with perhaps more acid in her voice than she intended. "It might not be your next, nor tomorrow, nor next spring—nor ever!"

Odd that she had felt an obscure satisfaction at the stricken looks on their faces when she had said it. Yet they had it coming to them. It was time someone shocked them into a sense of reality. It took a woman to be a realist. She had already faced the possibility and was reconciled to it. They were still living in an impossible dream.

Still she was sorry. She was sorry in the way she had always regretted having to make a bad boy in kindergarten go stand with his face to the wall. She tried to make up for it that evening.

"I understand," she said as they sat near the campfire out-



side the half-finished cabin. "You alter the torque, then try the various radio wave bands in the new position."

They both looked at her, a little surprised.

"It must be a slow and tedious procedure," she continued.

"Very," Sam said with a groan.

A shifting air current, carrying the sound of the waterfall, gave her an idea.

"Too bad you can't borrow the practice of Tibetan monks," she mused. "They tie their prayers to a wheel, set it in a running stream. Every turn of the wheel is a prayer sent up to their gods. That way they can get their praying done for them while they go about the more urgent matters of providing a living for themselves and their families."

She hadn't meant it to be so pointed, implying that all they were doing was sending up futile prayers to unheeding gods, implying they should be giving more attention to setting in winter stores. But even so . . .

"Miss Kitty," Sam said in a kind of awe. "You are a wonderful woman!"

In spite of her sudden flush of pleasure, she was irritated. As pointed as she had made it, he had missed it.

He turned and began talking excitedly to Lt. Harper. Yes, of course, they could rig up an auto-

matic method instead of doing it by hand. It could be done faster and more smoothly with electric motors, but the idea was the same. If Lt. Harper could rig a trip to kick the warp over another notch each time, they could run it night and day. Just let some kind of alarm bell start ringing, if they hit anything at the other end!

The two of them jumped to their feet then, grabbed her arms, squeezed them, and rushed away to the little shed they'd constructed beside the lifeship to hold some of their scattered equipment.

She felt vaguely regretful that she had mentioned it.

STILL she gained a great deal. The men finished the cabin in a hurry after that, and they put up their own bunkhouse in less than a week. Both jobs were obviously not done by experts, and she had fussed at them, although not unkindly, because she had had to chink such wide cracks with a mixture of clay and dried grass.

She moved into the larger cabin, discovered a dozen roof leaks
during the first hard rain they'd
had; got them patched, began
molding clay into dishes and containers, started pressuring the
boys to build her a ceramics kiln,
began to think about how their

clothes would eventually wear out and how she would have to find some way to weave cloth to replace them. Day by day she was less irritable, as the boys settled into a routine.

"I do believe," she said to herself one day, "I would be disappointed if they found a way
back!" She straightened up and
almost spilled the container of
wild rice she had been garnering
from the swampy spot at the upper reaches of the lake. "Why!
The very idea of saying such a
thing, Katheryn Kittredge!" But
her heart was not in the self
chiding.

But what reason, in heaven's name, would they have for staying here? Three people, marooned, growing old, dying one by one. There was no chance for Man's survival here. From the evidence about them, they had come to the conclusion that on this New Earth, in the tree of evolution, the bud to grow into a limb of primates had never formed.

She turned and looked at the tall, straight pines ahead of her. She saw the deciduous hard-woods, now gold and red, to one side of her. Behind her the lake was teeming with fish. The spicy smell of fall was all around her, and a stray breeze brought a scent of grapes she had overlooked when she was gathering all she could find to make a wine to

pleasantly surprise the boys.

She thought of the flock of wild chickens which had learned to hang around the cabin for scraps of food, the grunting lazy pigs, grown quite tame, begging her to find their acorns for them, the nanny goat with two half-grown kids Lt. Harper had brought back from a solitary walk he had taken.

New Earth was truly a paradise—and all to be wasted if there were not Man to appreciate it truly.

A thought knocked at her mind, but she resolutely shut it out, refused it even silent verbalization.

Yet, while she stooped over again and busied her hands with stripping the rice from the stalks without cutting them on the sharp dry leaves, she found herself thinking about Mendelian law. Line breeding from father to daughter, or brother to sister—in domestic animals, of course—was all right in fixing desirable traits, providing certain recessives in both the dam and the sire did not thus become dominant.

"There, Katheryn Kittredge," she mumbled with satisfaction. "Assuming the responsibilities of domesticity has not made you forget what you learned."

But the danger of fixing recessives into dominants through inbreeding was even less with half-brothers and sisters. Now daughters by one—er—sire could be bred to another sire to get only a quarter relationship to a similar cross from the other father—er—sire. She must work it out with a stylus in smooth clay. The boys had preempted every scrap of paper for their pointless calculations. But she could remember it, and it would be valuable in breeding up a desirable barnyard stock.

Yet it was odd that she assumed two males and only one female!

THEN and there, standing - ankle deep in the bog of wild rice, muddy to her knees in her torn coveralls, slapping at persistent mosquitoes, she came to terms with herself. In the back of her mind she had known it all the time. All this was without meaning unless there was Man —and a continuity of Man. Even so little as this gathering of wild rice, before the migrating ducks got it, was without meaning, if it were merely to stave off death from a purposeless existence. If there were no other fate for them than eventually to die, without posterity, then they might as well die tomorrow, today, now.

The men were still living in a dream of getting back. No doubt their lusting appetites were driv-

ing them to get back to their brazen, heavy-breasted, languor-ous-eyed hussies who pandered to all comers without shame! Miss Kitty was astonished at her sudden vehemence, the red wave of fury which swept over her.

But of course she was right. That was their urgent drive. "A male human is nothing more than a sex machine!" Wasn't that what her roommate at college had once said? Or was it her maiden aunt who had dominated her widowed mother and herself through all the years she was growing up? What did it matter who said it? She knew it was true. No wonder they were so anxious to get back to Old Earth! Her lip lifted in cynical scorn.

"You don't dare leave a young girl alone with a boy for five minutes," her aunt had once complained bitterly. "All they ever think about is . . ." her voice had dropped to a whisper and she had given that significant look to Katheryn's mother. But Katheryn had known what she meant, of course.

And it was true of all men.

Women, back on Old Earth, had looked at her with pity and a little contempt, because she had never, she had never... But you didn't have to have first hand experience to know. She had authoritative knowledge gleaned from reading between the lines of

the very best text books on abnormal psychology. She hadn't had to read between the lines of sundry surveys and reports. And if there had been no organized study at all, the movies, the TV, the published better fiction—all of it centered around that one theme—that one, alone, romanticize it or obscure it though they might.

It was all men ever thought about. And many women pandered to it—those sultry, shameless, undulating . . .

But Sam and Lt. Harper? It had been almost two months now since they had left Earth and those vile blondes. How had they restrained themselves during all this time!

Her fuming anger was suddenly overwhelmed by a warm rush
of gratitude, a sympathy which
brought a gush of tears into her
eyes to stream down her cheeks.
How blind she had been. Of
course! They were still bound by
their gentleman's Word of Honor, given to her on that first night
in the lifeship.

What splendid men! All right, so they had their faults; a little impractical, dreamers all, but with such nobility of character, truly they were fit to be the fathers of a proud and noble race. And, in time, with herself to shape and guide them . . .

She straightened her aching

back from bending over the rice reeds, thrust out her scrawny chest, and breathed deeply. She lifted her chin resolutely.

"Katheryn Kittredge," she said firmly. "A woman's place is more than merely cooking and cleaning and mending!"

SUPPER, that evening, was a dinner, a special dinner. She set before the two men a whole roast young tom turkey, with a touch of frosted persimmons mixed with wild honey to enliven the light meat. There was a dressing of boiled maise and wild rice, seasoned with wild onion and thyme. There were little red tomatoes, tough but tasty. There were baked yams. There was a custard of goat milk and turkey eggs sweetened with honey.

Instead of the usual sassafras tea to which their digestion had finally adjusted, there was grape wine in their cups. It wasn't a very good wine, still green and sharp, but the occasion called for it.

Both of them looked at her with wonder, when they came in at her call and saw the table. But they didn't ask any questions. They just started eating and, for once, they forgot to talk about warp theory.

She, herself, ate little. She was content to look at them. The lieutenant, tall and strong, big-

boned, dark-complexioned, square-faced, white even teeth. Sam, smalled-boned, fair-complexioned, hair bleached straw from the outdoor sun. He had been inclined to be a little stout when she first saw him, but now he had that muscular wiriness which comes with hard physical work-and clean living. His daughters would be delicate. lovely, yet strong. The lieutenant's sons . . .

She watched, in a kind of rapture, the ripple of muscles beneath their shirts, the way the pillar of the neck arose from strong shoulders to support a well-shaped head, the way the muscles of jaws rippled under their lean cheeks as they chewed. The way their intelligent eyes flashed appreciation at each savory mouthful.

"It occurs to me, Sam," Lt. Harper said as he washed down some turkey with a healthy quaff of wine. "We could give a little more attention to scraping up food for Miss Kitty to cook. Now you take this brown rice, for example, we could rig up a polishing mill so she'd have white rice . . ."

"Nonsense," Miss Kitty said firmly. "All the proper food value lies in the brown covering. I will not have the children's eating habits spoiled from the beginning..." Appalled, she realized what she had said. Both men stopped chewing and stared at her.

"What children, Miss Kitty?" Lt. Harper asked, and he was looking at her intently.

She dropped her eyes to her plate. She felt the red flush arising around her neck, up into her face. She couldn't face him. Yet, it had to be done. It must be made quite clear to him, both of them, that . . .

"Our children," she said distinctly, and felt their eyes boring into the top of her head. "And I wish you both would stop calling me Miss Kitty, as if—as if you were kindergarten children and I was the old maid school teacher! All three of us are adults, men and a woman. In spite of what you may think, I am not a great deal older than either of you. There will be children! If it works out the way I plan, I believe I do have time for at least six sons and daughters before I reach . . . before my barren years."

She heard Sam's fork clatter down on the table top as he dropped it. She heard Lt. Harper's feet scrape, as if he had been about to leap to his feet. Without seeing it, she almost felt them look at one another.

Well, she had made it plain enough.

But they didn't say anything.

Suddenly she could stand it no longer. Slowly, in dignity, she arose to her feet and without looking at them she walked, head down, to her door. Then she realized she had perhaps been too crisp, too businesslike about it all. A vision of the kind of women they must have known, the kind which would arouse their passion, the kind which would make it all unmistakable . . .

She had a flashing memory of a girl back in college, one smitten with a football hero, trying to captivate the hero, draw him to her. On impulse, Miss Kitty imitated that girl now, and a little tableau she remembered.

At her doorway she turned, and looked at them over her shoulder. She lifted her shoulder so that it touched her chin. She drooped her eyes half shut.

"My name is Katheryn," she said, and she tried to make her voice husky instead of tremulous and frightened. "Call me Kathy, call me Kate, call me Kay."

Both men were staring at her with wide eyes and open mouths as she closed her door. She made sure there was no sound of a latch turning to discourage them.

SHE undressed herself slowly, and, for the first time other than for bathing, completely. She felt grateful for the time they were giving her. No doubt they

were talking it over, man to man, in the way of civilized, educated . . . She crawled in between the blankets, fresh and smelling of sunshine from being washed in the clear water of the lake. She was a little regretful she had no perfume; that was something they didn't put into lifeboats.

She waited.

She heard the low rumble of male voices in the other room. They were undoubtedly discussing it. She felt grateful relief that their voices had not risen. They were not quarreling over her—not yet. She did hope they would continue to be sensible.

She heard one of the stools scrape on the rough split log floor. She caught her breath in a gasp, found her hands were clutching the covers and pulling them tightly up to her chin. She willed her hands to relax. She willed the tenseness out of her rigid body.

She heard the other stool scrape. Surely they were not both . . .

She heard their feet walking across the floor, the heavy steps of the lieutenant, the lighter, springier steps of Sam. She gritted her teeth and clenched her eyes tight shut.

And then she heard the outer door close softly.

Which one? Which had remained behind? She waited.

Then she heard footsteps outside. She tried to identify, by sound, which man was making the noise, but the shuffling of leaves was confusing, as if more than one person were walking cutside. And where was the other man? Why had he made no sound in the outer room? Was he quietly drinking up the wine—first? Then, distinctly, she recognized two pairs of feet outside, going farther away, in the direction of the men's bunkhouse.

She could not bear the suspense. She sprang out of bed clutching one of the blankets about her. Slowly, soundlessly, she opened her door a crack. She could see no one in the flickering firelight of the room. They had turned out the lights. Or—he had. She opened the door wide.

It had been they, not he. Both men had gone.

PADVERTENTLY something between a sob and a hiccough rattled her throat. She choked back another. She would not give way to . . . rage? . . . frustration? . . . relief? . . . fear?

Fear!

She had seen the movies, she had read the stories, she had overheard boys. "I'll fix you when we get outside! You meet me in the alley and I'll show you!"

These two men. Were they going off into the darkness to settle a conflict which they had not been able to resolve through sensible agreement? There, under the trees in the moonlight, would they, denying all the progress of the sacred centuries, would they revert to the primitive, the savage; and like two rutting male animals rend and tear and battle with one another for the only female?

Oh, no! No, they must not! There was no doubt that the lieutenant with his great, massive strength . . . But the human race of New Earth must have the fine sensitivity, the lithe grace of Sam's kind, also!

She tugged the blanket around her shoulders and ran toward the door. She must reach them, step in between them, even at the cost of receiving some of the blows upon herself, make them realize...

She felt herself shivering as she opened the door, shivering as if with an ague. She felt her face burning, as if with a fever. Her teeth were chattering in anguish. She tried to still the noise of her teeth, to listen for those horrible sounds of silent men in a death conflict somewhere out there in the moonlight.

Then she saw a chink of light through a crack in the wall of the bunkhouse, where the clay had dried and fallen away from the logs.

In there? What were they doing in there?

Instead of their fists and crushing arms, were they stalking one another with knives? She remembered scenes from Western movies, the overturned tables, the crash of things thrown. Had some sense of chivalry still remained in the lieutenant, and he, knowing Sam wouldn't stand a chance in hand to hand conflict, devised some contest which would be more fair?

There need be no contest. If only they would be sensible, work out an equitable schedule . . .

Barefooted, she ran across the ground toward the bunkhouse. She had visions of herself throwing open the door, shocking them to stillness in a tableau of violence. She was close now. She should be able to hear the crashing of their table and chairs.

She could hear nothing at all. Was she too late? Even now, was one of them standing above the other, holding a dripping knife? What horrors might she run into, even precipitate, if she threw open the door? Caution, Katheryn!

Instead, she crept up to the crack in the wall. Her teeth were chattering so hard, she had difficulty in holding her head still enough to peer through the slit

of light. With her free hand, her shoulders were shaking so hard she had difficulty in clutching the blanket about her with the other, she grabbed her jaw and held on, to still her shaking. Her eyes focused on the scene inside the room.

SHE had a three-quarter vision of each man and the table between them. They were dealing a greasy pack of cards! Were they going to gamble for her? Relief and shame intermingled in her reaction. She would have preferred they settle it with more elemental . . . It would have made it less . . . Yet, this way neither would be killed. Sons and daughters from both . . .

"How are we going to tell her now?" Sam asked, as he picked up his cards. His voice came distinctly through the wall crack.

"We should have told her about our wives and families right at the start," Harper answered morosely. "I don't know why we didn't. Except that, well, none of us have talked about things back home. She didn't, and so we didn't either."

"But I never dreamed Miss Kitty would start getting ideas," Sam said in a heartsick voice. "I just never dreamed she . . ."

"We're going to have to tell her," Harper said resolutely. "We'll just have to tell her that, well, there's still hope and as long as there's hope . . ."

Blindly, in an anguish of shame such as she had never known, Miss Kitty crept away from the bunkhouse, and stumbled back to the cabin. Now she was shivering so violently she could hardly walk. The exposure to the night air, the nervous tension, overwrought emotions . . .

She could not remember getting back into the cabin, crawling into bed. She knew only that a little later she was in bed, still shaking violently with a chill, burning with fever.

She was awakened in the morning with the sound of the axe chopping on wood. She dragged herself out of bed, forlorn, sick, filled with shame. Her head spun so wildly that she sank to her knees and lay it on the bed. Then her pride and her will forced her to her feet, and she drove herself to dress, to go into the big room, dig out glowing coals from beneath ashes, put them in the little cook stove, pile fine slivers of resin-rich kindling on top of them, blow on them.

Between painful breaths, she heard herself sobbing. Her teeth started chattering again, and there was a ringing in her ears. She heard the blows of the axe falling on the wood, and each blow transferred itself to the base of her skull. The ringing in her

ears grew louder and louder.

She heard one of the men shout. It sounded like Sam. Had he hurt himself with the axe, gashed his leg or something? She'd always been afraid of that axe! She'd told them and told them to be careful!

She pulled herself up from her knees there at the stove where she had been blowing on the coals. She must get out there, help him! That terrible buzzing in her head, that ringing in her ears. No matter, she must get out there to help him.

She threw open the door and saw Sam running toward the life-ship. Had he lost his mind? The bandages were here. She had them here! She saw Lt. Harper come to the door of the bunk-house. He was still pulling on his pants. He started running toward the lifeship, too, cinching his belt as he ran.

Then she realized that at least part of the ringing in her ears came from the lifeship. At first it had no meaning for her, then she remembered them talking about fixing up some kind of alarm, so that if they got a signal through . . .

She started running toward the lifeship. She stumbled, fell, got up, felt as light as a feather, as heavy as mercury. She crawled up the steps of the lifeship, she clutched at the door. She heard

Sam speaking very slowly, carefully.

"Do you read me? Is this Earth?"

She saw his face. She knew the answer.

And that was the last she knew.

CONSCIOUSNESS came back in little dribbles like a montage—half reality and half nightmare of the insomniac. Lt. Harper's voice shouting at her with a roar like a waterfall, "My God, Miss Kitty, are you sick?" Blackness. More shouting, Sam calling the lieutenant, something about a red flare in the sky. A lucid moment, when Sam was explaining to her that Earth had been given the warp coordinates, and had sent a red flare to see if they could get through. Then another gap. A heavy trampling of feet, a great many feet. Some kind of memory of a woman in white, sticking a thermometer in her mouth. The prick of a needle in her arm. The sense of being carried. A memory of knowing she was in a ship. A flash that was more felt than seen.

Nightmares! All nightmares. She would wake up in a moment. She would get up, dress, go out and start a fire to heat water on the cookstove. She had planned to have coffee, a special treat from their almost exhausted



store. She would have coffee. The men would come in sheepish, evading her glance.

Very well, she would simply tell them that she had misunderstood, save them the embarrassment of telling her. She would not be the woman scorned.

She moved her hands to throw back her blankets, and froze. Her fingers had not touched blankets, they had touched cool, slick sheets! Her eyes popped open.

It had not been a nightmare, a wish fulfillment of escape. She was in a hospital room. A nurse was standing beside her bed, looking down at her. A comfortably motherly-looking sort of woman was speaking to her.

"Well, now, Miss Kittredge, that's much better!" the woman said. "So you will go gather wild rice in the swamp and get your bloodstream full of bugs!" But it was a professional kind of chiding, the same way she had talked to her kindergarten children when they'd got themselves into trouble.

"Still," the nurse chatted, "it's made our pathologists mighty happy. They've been having themselves a ball analyzing the bugs you three managed to pick up. You got something close to malaria. The two men, healthy oxen, didn't get anything at all. We had to let 'em out of quarantine in three days."

MISS KITTY just looked at her in a sort of unthinking lassitude. She was still trying to make the reality seem real. The nurse helped a little. She turned to her cart and produced a white enamel, flat container. She slid it under the top sheet.

"Upsy-daisy now, Miss Kittredge," she said firmly. "It's time you started cooperating a little."

Yes, that brought her back to reality. But she still didn't say anything.

"Although we might as well not have let 'em out of quarantine," the nurse grumbled. "They've just been living out there in the waiting room for a solid week, buttonholing everybody from doctors down to orderlies asking about you."

She gave a soft wolf whistle. "Whew, imagine having not just one guy but two of 'em, absolutely crazy about you. Just begging to see you, hold your hand a little. Two beautiful men like that! You ready to see them soon?"

Miss Kitty felt a rush of shame again. In the cabin she would have been forced to face them, but not now.

"No," she said firmly. "I never want to see them again."

"Well, now, let me tell you something, Miss Kittredge," the nurse said, and this time there was a note of seriousness. "One

of the symptoms of this sickness you picked up is that it makes you talk. Gal, you have talked a blue streak for the last week. We know everything, everything that happened, everything you thought about. The doctor understood how you might feel about things. So he told the lieutenant and Mr. Eade that you had got bitten about the time you were up in the rice swamp, and that you hadn't been responsible for anything you'd said for the last three days back there on New Earth."

Miss Kitty felt a flood of relief.

"Did they believe the doctor?" she asked hesitantly.

"Sure they believed him," the nurse answered. "Sure they did. But you wanna know something? I've talked to those two men. And I've just got myself an idea that it wouldn't have made a particle of difference in the way they feel about you even if they didn't believe it. You're tops with those two guys, lady. Absolutely tip-top tops. The way you pitched in there, carried your share of things . . ."

She slipped the pan out from under the sheets, and put it into a compartment of the cart.

"You wanna know something else? I don't think you were out of your head at all when you propositioned those two guys. I

think you were showing some good female sense, maybe for the first time in your life. And I think they know you were.

"You think it over, Miss Kittredge. If I know you—and I
ought to after listening to you
rave day after day—you've got
what it takes. You want my advice? You go right on being a
normal female. Don't you be silly
enough to get back into that
warped, twisted, frustrated kind
of a man-hater you always
thought you were.

"I gotta go now. You think it over. But not too long. Those two guys are going to be mighty, mighty hurt if they find out you're conscious and won't see them."

She went out the door, pushing her cart in front of her.

Willed the tenseness out of her body, and just lay for a while thinking of nothing. A gust, a rattle of raindrops, called her attention to the window. They had put her on the ground floor. She was able to see through the window to the street outside. The rain was pelting down, like that first rain they'd had there on New Earth. How chagrined the boys had looked when the roof started leaking in a dozen places!

She felt a warm sense of relief, of gratitude, that she could re-

member them without shame. The nurse had been right, of course. Probably the doctors had planted that particular nurse in her room, anticipating her return to consciousness, anticipating the necessity for a little mental therapy.

Good female sense. With such a semantic difference from good male sense! The mind of a man and a woman was not the same. She knew that now. And she realized that deeply, hidden from her own admittance, she had always known it. And the nurse's good earthy expression—"propositioning those two guys"—approval that it had been natural and right. And another expression, "the way you pitched in share there, carried your things."

Carried your share of things! That meant more than just cooking, mending, cleaning. More than just seeing that the race continued, too; although it somehow tied in with all these things.

She lay in her bed, watching the rain through the window, getting comfort from the soft, drumming sound. Along the street she could see people sloshing through the film of water underfoot. She watched the scene of turned-up collars, pulled-down hatbrims, bobbing umbrellas, as if it were something apart from her, and yet a part of her. She

began to get a sense of rare vision, an understanding which she knew was more complete than any intellectual abstraction she had ever managed. She began to get a woman's sense of purpose, completely distinct from that of a man.

SHE recalled once reading of an incident where an Oklahoma oil millionaire had built a huge mansion; then, because his squaw did not know how to make a home within it, they pitched their tepee in the front grounds, to live there, unable to feel at home in anything else.

Yes, too often the mansions of science came in for a similar treatment. The vast rooms of ideas, the great halls of expansion, the limitless ceilings of challenge, the wide expanses of things all speculation; these which would exalt Man into a truly great existence were denied, put to no use beyond mere gadgetry. And the mass of human beings still huddled in their cramped and grimy little tepees of ancient syndromes, only there feeling at home.

It was the fault of the women. They had not kept up with the men. Those who attempted it tried to be men, to prove themselves as good a man as any man, the way she had done.

They had missed the real point

entirely, every single bit of it.

The male was still functioning in the way males always had. There was no essential difference between the cave man who climbed a new mountain and explored a new valley and brought back a speared deer to throw down at the entrance of his home cave; no difference between him and the modern explorer of science who, under similar hardships, brought back a bright and rich new knowledge.

But the ancient cave woman had not failed. She had known what to do with the deer to strengthen and secure the future of the race.

And what about New Earth?
Lt. Harper and Sam had talked about the possibility of millions of Earths, each infinitesimally removed from the other, and if they could bridge the gap to one, they might bridge it to an uncountable number. Perhaps there were millions of others, but for her there was only one New Earth.

Would the processions of colonists going there spoil it? Would the women going there see in it a great mansion? Or, instead, would they simply go there to escape here—escape from exhaustion, failure, anguish, bitterness—and, as always, take these things along with them? Would they still live in grimy little syndromes

of endless antagonism, bickering in their foolish frustrations, because they had no wisdom about what to do with this newly speared deer?

Oh, not on New Earth!

Suddenly Miss Kitty knew what she must do. If that one particular mansion needed someone to make it into a home, why not herself? And who had a better right?

Somewhere, there, perhaps that very one striding along under the eaves of that building across the street, with his hatbrim pulled down, leaning against the rain, somewhere, close, there must be a man who could share her resolution and her dream. A man of the same breed as the lieutenant and Sam, a man who carried his head high, his shoulders back, who had keen, intelligent eyes, and laughter.

Yes, now she wanted to see the two men after all, and meet their lucky wives, and see their children, the kind of children she might have had.

Might yet have!

At a flash of memory, she smiled a little ruefully, and yet with an inner peace.

"I am not so old," she repeated in a whisper. "I still have time for at least a half dozen sons and daughters before—before my barren years."

-MARK CLIFTON

(Continued from page 4)

I don't know, Maje. You figure it out. But don't just gabble along psuedo - scientifically. Be entertaining! You demand it of me; okay, I demand it of you.

What else is on my mind? Well, books are piling up, but they obstinately won't make complete editorials. The Tastemakers by Russell Lynes (Harper), for example, proves a quote from Arthur A. Houghton, Jr., of Corning Glass:

"In our modern industrial society, it is the professional designer who increasingly is determining the appearance of our physical environment. The individual is less and less able to participate in this determination."

That's bad? From typewriters to toasters, merchandise looks and functions better as a result. They've weaned us from beaded lampshades, square cars, rhinestone houses, Rosa Bonheur and Venuses with clocks in their bellies—and have you admired the way packaging engineers box dishes and glassware so even the post office can't do its usual creative damage?

The tastemakers may fumble here and there, but I'm not a bit afraid to say I'm for them!

Isn't One Wife Enough? by Kimball Young (Holt) explores Mormon polygamy, a subject that writers find tiresomely fas-

cinating. If it appeals to them, they should have their heads examined or examine this book.

Bergen Evans calls Mormon polygamy "multiple monogamy" because each wife had to have her own home. But it's that even in a harem. Men who submit to polygamy deserve to be called saints, for the setup is always costly, bothersome and harrowingly complex. As you'd expect, most Mormon men cravenly avoided it.

Then there's Sea, Sun and Sky by Irving P. Krick and Roscoe Fleming (Lippincott), a fine meteorological source book and plain good reading. It's the kind of thing that can't be discussed without quotes and, once started, I probably wouldn't be able to stop. Read it for yourself, Maje, and you'll see what I mean. (There's no mention of a possible world without any weather, but I guess that would be asking too much.)

Speaking of not being able to stop quoting, all I can do is suggest Fred Allen's Treadmill to Oblivion (Simon & Schuster), which I zipped through because I damned well wanted to and practically all of it is both hilariously and shrewdly quotable.

You see what I mean, Maje? Sometimes you simply can't put together an entertaining editorial.

—H. L. GOLD

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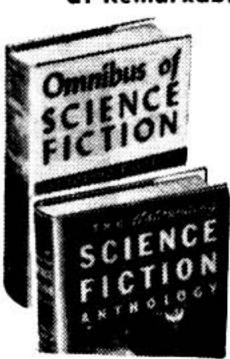
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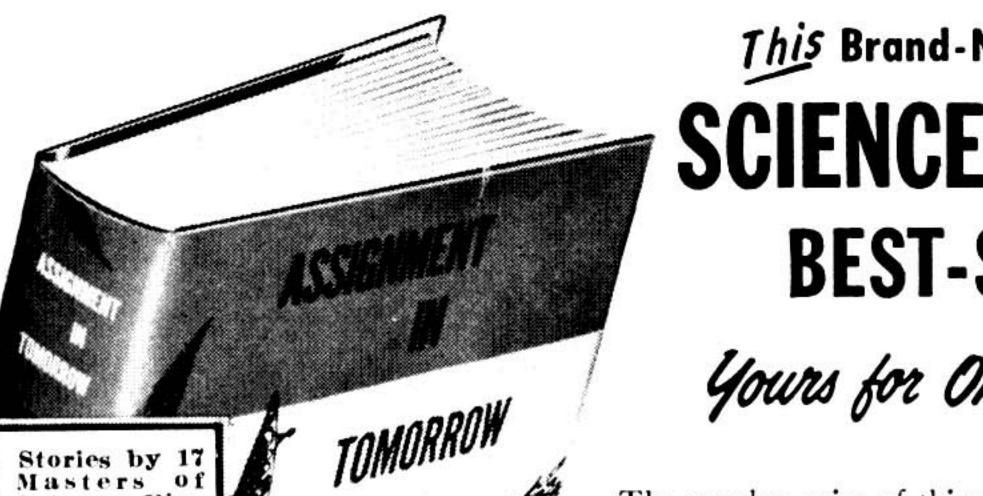
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